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JUDAH MESSER LEON'S
COMMENTARY ON THE "VETUS LOGICA".



JUDAH MESSER LEON'S
COMMENTARY ON THE "VETUS LOGICA"

A STUDY

BASED ON THREE MSS.

WITH A

GLOSSARY OF HEBREW LOGICAL AND
PHILOSOPHICAL TERMS

A THESIS

Presented to the Faculty of Philosophy of the University
of Pennsylvania in Partial Fulfilment of the Requirements for the
Degree of Doctor of Philosophy, June, 1903

BY

ISAAC HUSIK



Late E. J. BRILL
LEYDEN (Holland)
1906

TO THOSE OF MY FRIENDS TO WHOM I OWE MORE THAN
I CAN EXPRESS, THIS HUMBLE EFFORT IS GRATEFULLY
DEDICATED.

P R E F A C E.

There is a great mass of material existing in the European libraries, of works written in Hebrew, original and translated, on subjects philosophical and scientific. The material to which in particular I am referring dates from the middle ages, and an examination of it, though laborious, no doubt, and tedious, would yet be of great interest and would contribute not a little to our knowledge of mediaeval learning. Workers in this field are necessarily few, and it is with more than ordinary gratitude that the scholastic world welcomes a work of such stupendous erudition and labor as that of STEINSCHNEIDER, entitled "Die Hebräischen Uebersetzungen des Mittelalters, und die Juden als Dolmetscher". Being a relatively pioneer work, it is not so much literary as it is bibliographical; but it remains the sole quarry from which every later worker in that field must hew, and it goes without saying that my work could never have been done if not for Steinschneider.

From the material which Steinschneider has thus with his wonderful erudition gathered in that volume, I have selected one author — a single stone out of that rich quarry — to be more exact, one work of one author, for a more detailed examination.

PRANTL's "Geschichte der Logik", another work of wonderful learning and critical acumen, was next to STEINSCHNEIDER the *sine qua non* of this essay. If the little I have done will be privileged at some time to contribute its mite to the work of a future Renan — a tile in his beautiful edifice — it will not have been done in vain.

The book which is now offered to the reader represents a doctor's dissertation presented to the Faculty of Philosophy

of the University of Pennsylvania, in June 1903; partly rewritten and slightly enlarged during part of my tenure of a University Fellowship for Research in Philosophy at the same institution, to the authorities of which I embrace this opportunity of expressing my obligations for many signs of encouragement and acts of kindness.

The parts newly added are § 2, on the life and works of Messer Leon, the glossary and the index. The portion of the section on the sources of Messer Leon, dealing with his indebtedness to Walter Burleigh was entirely rewritten as a result of my securing a copy of Burleigh's "*Super Artem Veterem Expositio*", for the loan of which I have to thank the authorities of the library of Yale University.

My work would not be complete if I did not avow the many debts of gratitude I owe to those who in various ways have made it possible for me to accomplish the task I undertook. To the authorities of the Royal Library of Munich, the Paris National Library, the Bodleyan library of Oxford, the British Museum, and the State Library of Leipzig, my thanks are due for their kind permission to use the mss. on which this study is based. The libraries of Columbia, Yale and Princeton Universities in this country were kind enough to lend me rare volumes indispensable to the successful prosecution of my work. Finally I must especially thank my teachers in Semitics and Philosophy respectively, Professors MORRIS JASTROW, and WILLIAM ROMANE NEWBOLD of the University of Pennsylvania, the former for the generous way in which by his knowledge of men and things, he helped me out of many a difficulty, and made smooth many a path that might otherwise have been rough and difficult of access; the latter for the encouraging interest he showed in my work, for his knowledge of Aristotle which stood me in good stead, and for the good advice and valuable suggestions which he gave me in the course of reading this essay.

PHILADELPHIA,
August 11th, 1905.

ISAAC HUSIK.

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§ 1. INTRODUCTION ¹.

As is well known, the Jews in the Middle Ages became acquainted with Aristotle through the Arabians. The first use made by them of the Peripatetic philosophy was in the interest of religion, namely to establish the fundamental beliefs of Judaism on a philosophic basis. With this object the Karaite Jews in the East, in the eighth and ninth centuries, made use of the dialectic of Aristotle, which began to be cultivated then by the Arabs. Of the works of these early Karaites, only very few are now extant. The first famous Jewish philosopher who shows a knowledge of the Aristotelian philosophy is Saadiah ben Joseph Al-Fayyumi, who was born in Egypt in 892, and died at Sora (near Bagdad) in 942. In his chief work, "Emunoth ve-Deoth" (bk. II, ch. 8 ff.), he makes use of the Categories, proving that they are not applicable to God. Shortly after the death of Saadiah, the Jews as well as the Arabians in Spain, began to imitate their brethren of the East in the study of philosophy and Aristotle. As a result we have a succession of famous names in the history of Jewish philosophy, such as Ibn Gebirol, Jehudah Halevi, Abraham ben David of Toledo, and the most famous of them all, Moses ben Maimon, commonly known as Maimonides. All these lived in Spain and wrote their works in Arabic. Aristotle, too, they must have read

¹ This introduction is based upon Munk, "Mélanges &c.", Renan, "Averroës et l'Averroïsme", and Steinschneider, "Die Hebräischen Uebersetzungen des Mittelalters &c.".

in the Arabic translations of Honein ibn Ishak, Ishak ben Honein, Jachja ben Adi, Abu-Baschar Mata, &c.

The Arabian philosopher Averroes was a contemporary of Maimonides, and though the latter did not read the commentaries of Averroes till towards the end of his life, when he was in Egypt, he clearly indicated in one of his letters his high regard for Averroes as an interpreter of Aristotle, and recommended the study of the commentaries to his disciples. The great authority of Maimonides directed the attention of all Jewish students to Averroes, and there is evidence that the latter became very early, perhaps during his life-time, an object of wide study among the Jews.

In the twelfth century, the fanaticism of the Almohades in Spain forbade all study of philosophy, and forced its prominent advocates to seek refuge in other lands. The works of the Arabian philosophers were ordered to be burnt, and to this we must attribute the almost complete loss of the works of Averroes and Alfarabi in the original Arabic.

The rescue of these works in any shape is due to the Jews. The persecutions instituted by the Almohades forced them to transfer the centre of their literary activities to Christian Spain and the south of France, where they may be said to have continued the work of the Arabian philosophers. Outside of Spain, however, the majority of students were not at home in the Arabic, and a need was felt to have the works of the Arabian philosophers translated into Hebrew. Besides, Frederick II, who was anxious to spread the culture of the Arabs in Europe, encouraged the translation of Arabic works into Hebrew, as these could more easily be rendered in turn into Latin than the original Arabic. Thus a host of translators and commentators arose, originating in Provence in the thirteenth century, such as Jacob ben Abba Mari ben Anatoli, Moses son of Samuel ibn Tibbon,

Levi ben Gerson, Calonymus ben Calonymus, Todros Todrosi, Moses of Narbonne, Jacob ben Machir of Montpellier, Samuel ben Judah of Marseilles, and many others.

The most flourishing period of the study of Averroes among the Jews was the fourteenth century, and the most famous philosopher of the time was Levi ben Gerson, commonly known as Gersonides. Besides his original philosophical work, "Milchamoth Adonai", and his Biblical commentaries written in a philosophic vein, he wrote commentaries to almost all the Aristotelian works of Averroes. These are still in ms. with the exception of those on the *Isagoge* of Porphyry and the *Categories* and *Interpretation* of Aristotle, which were translated into Latin by Jacob Mantinus in the beginning of the sixteenth century, and incorporated into the Venice Latin editions of Aristotle with the commentaries of Averroes.

In the fifteenth century Averroes still continued to be studied, but the Averroistic philosophy was already on the decline. As the last representatives of Averroism may be mentioned, Elias del Medigo, who taught philosophy at Padua, and had as a pupil the celebrated Pico di Mirandola, and Judah ben Jechiel Messer Leon of Mantua, the subject of the present work. At the end of the fifteenth century, the expulsion of the Jews from Spain destroyed the centre of Jewish civilization. On the other hand the cruel persecutions they had to undergo prevented them from taking part in the new intellectual life that was then arising in Europe. The period of philosophical activity among the Jews as a nation came to an end. This accounts for the fact that with scarcely any exceptions the Hebrew works dealing with the commentaries of Averroes or the Aristotelian philosophy in general are in ms., and we have the strange phenomenon in the case of so famous a man as Gersonides, that whereas those parts of his Averroistic commentaries which were transla-

ted into Latin were published several times, the originals of these, and the other commentaries that were not translated still remain in ms. The decline of Jewish Aristotelian studies in the fifteenth century is also responsible for the circumstance that while there is a very great number of Hebrew translations of Averroes' commentaries, there is scarcely any Hebrew translation of the text of Aristotle, and none at all made from the Greek. In the thirteenth century, the fame of Averroes, thanks to the high recommendation of Maimonides, became so great, that no one cared for the original words of Aristotle, and all study was directed to the "Commentator".

When, in the time of the Renaissance, the original Aristotle in Greek appeared, and disputes arose between the followers of Averroes and those of Alexander, the Jews were no longer in a position to take part in, and benefit by, the light of the Greek text. The only advance the Jews made on their early middle ages in the study of Aristotle was that they were no longer satisfied with Averroes alone, and made use of the Latin translations of Aristotle to correct Averroes. A beginning was thus made towards a more exact knowledge, which under more favorable circumstances might have led directly to the Greek texts and to a new era in Jewish Aristotelian studies. But this was not be.

§ 2. JUDAH MESSER LEON ¹.

Of the life of Judah ben Jechiel, surnamed Messer Leon, little is known. His father Jechiel was a physician and seems to have been still alive in 1455. His son Judah settled in

¹ For this sketch of his life and works I am indebted to Steinschneider, *Heb. Ueb.* pp. 77—86, the same author's article in *Ersch u. Gruber* II, 43, p. 118 ff., and Schechter, *Rev. d. Et. Juiv.*, XXIV, p. 120.

Mantua where he was granted the privilege of wearing the "cappa" (as a mark of rabbinical authority) by the rabbi of the place, Joseph Kolon. Later Kolon changed his mind and a quarrel was precipitated involving the partizans of the two leaders. This became so violent that in 1475 the Duke banished both Judah and Kolon from the city. We find Judah later in Naples. Neither the date of his birth nor that of his death is known. He wrote on grammar, rhetoric and philosophy, but his works, with the exception of the rhetoric, are still in ms. The only languages he knew were Hebrew and Latin, and he seems to have been the first to introduce Latin literature, ancient as well as mediæval, to his co-religionists. A list of his works is contained in a letter of his son David to a certain other David of Tivoli(?) found in Florence (Mss. Medici Plut. 88). The passage is worth quoting.

וידעתי כי נכסוף נכספת לדעת הספרים אשר חבר הרב הגדול המאיר לארץ ולדרים עליה מדברנא דאומתי א"א יצ"ו ועל זה ראיתי לזכרם לכבודך איש על מקומו ואשר קרא בשמותם עלי אדמות, האחד לבנת הספיר והוא חבור בדקדוק ואחרי כן יצא אחיו שמו מכלל יופי אשר בו מחבמת ההגיון כללים רבים חדשים גם ישנים, ושם השלישי נופת צופים אשר ביאר בו מתק הדיבור ועריבותו בדברי הנבואים להלל מאד גם חבר פירוש על מביא מאמרות מליצה ... כוננה ידיו בבולוניה ... והאחד הוא פירוש ס' המופת אשר נכבדות מדובר בו והגיע אל גלות ירושלים אשר בספרד ליד חכם מורה צדק ויתן אותו ברקיע השמים לגדולה ולתפארת גם חבר במנטיבא ס' על ד' מאמרים מן השמע טבעי נאה ונורא ומבאר דברי בן רש"ד ומישב הארוך עם הנוסחא נצרית והאמצעי ומביא כל הדרושים בכל מאמר ומאמר עד לא יצטרך לראות ספר אחר וגדלה תפארתו היה לראש פנה, ומיזום אחרים התחיל ביאר התורה עם כל הדרושים הנופלים בלב האדם בעיני האל ואין ערוך לו ועושה כל ס' בראשית ואלה שמות ופרשת וארא גם יהודה שת קציר לו במלאכת הרפואה וחבר ספר אחד בלשון נצרי כלל כל מיני החלאים יקר הוא מפנינים ועשה חדשים רבים על הראשון מהקאנוי באופן הראשון ובאר האופן השני ממנו ...

From this, following the order in the letter, we see that

he wrote (1) *לכנת הספיר*, a Hebrew grammar; (2) *מכלל יופי*, a compendium of logic; (3) *נופת צופים*, a rhetoric; (4) a commentary on the Isagoge of Porphyry, and the Categories and Interpretation of Aristotle. This was written in Bologna. (5) A commentary on the Posterior Analytics, which found its way to Spain, where it received high praise; (6) a work written in Mantua on four books of Aristotle's Physics, harmonizing Averroes' 'great' commentary with the Latin translation of Aristotle and Averroes' middle commentary; (7) a commentary begun on the Bible; (8) a work in Latin on diseases; (9) notes to the Canon of Avicenna.

To these works mentioned by his son are to be added: (10) a commentary on the Prior Analytics; (11) a commentary on the Ethics of Aristotle. This is mentioned by his grandson Aaron as extant in 1576. (12) *מורה צדק*, a commentary on Maimonides' "Guide to the Perplexed". This was in the possession of David Vital, who lost it at the conquest of Patras, about 1532 (?). (13) A commentary on the "Bechinath Olam" of Jedaiah Ha-Penini; (14) *Theses Academicæ*, short notes, according to Steinschneider, Ersch u. Grubber l. c.; (15) Prayers and Hymns; (16) Sermons for his pupils; (17) Rules of Slaughter and examination of animals; (18) and (19), commentaries on the De Anima and the Metaphysics referred to in (4). Of these (1), (2), (3), (4), (5), (10) (a fragment), (13), (14), (15), (16), (17), are extant in ms. only, with the exception of (3), which was printed twice, once in the fifteenth century, and again in 1863, by Adolph Jellinek. Of the rest, Steinschneider is uncertain about (7), (9), and (11), suggesting doubtfully that they might be identified with extant works in ms. on the respective subjects. (6), (8), (12), are as far as is known not extant, while (18) and (19) are merely promises made by Messer Leon of works he intended to write, and it is doubtful whether he wrote

them. We are here concerned with (4) only — the commentary on the “Vetus Logica”.

§ 3. THE MSS.

Of this work, Steinschneider (*op. cit.* p. 81) names six extant mss. containing the complete commentary to the three books, viz. Isagoge, Categories and Interpretation; and one ms. containing only the Categories. To this list must be added British Museum Sloane 3265 (formerly 3030). Steinschneider's brief sketch of the work (*op. cit.* pp. 82—84) is based entirely on the Munich ms. (Mn), which is very corrupt and contains a few large omissions and most probably one interpolation which is quoted later. The present study is based upon a careful collation of three mss. and a hasty glance at a fourth, viz. (1) Munich Royal Library, Mn 27, here for brevity referred to as Mn. (2) Paris National Library, P. 999 (P). (3) Oxford, Bodleyan Library, Mich. 620, (O). (4) London British Museum, Br. Mus. Sloane 3265, (L).

§ 4. DATE OF MSS.

In a letter of the year 1474 (Steinsch. *op. c.* p. 78), Messer Leon says that he commented on the Isagoge, Categories and Interpretation twenty years previously. This brings the date of composition to 1454. Of the four mss. mentioned above, Mn and P are not dated. O has an inscription at the end of the work stating that it was written by Abraham Farissol for the brothers Judah and Jacob at their house, and was finished on Wednesday the 15th of the month Shebath, 5232, on Mantua paper. This corresponds to 1472. The inscription is as follows:

והאל אשר עזר לעבדו אברהם בן מרדכי פריצול להשלים העתקת הפירוש

הנכבד הזה בן יעזור לעיין ולחנות בזה לאחים הנכבדים נדיבי הארץ עם
 הלוח צאצאיהם בדרכי ו' וזה הספר אנכי אברהם כתבתיו לר' יהודה ור'
 יעקב אחים בביתם ונשלם ביום ד' בחמשה ימים לחדש שבט רל"ב בנייר
 מנובא

L likewise has a note at the end of the Categories stating that it was written in Naples in the house of Messer Leon, on the 12th of Ab 5240 = 1480. The colophon is as follows:

י"ב לחדש אב אל שנת ה"ם וסימנה לפרט כה אמר רם ונשא בנאפילי
 בבית הכנסת של הלועים ה"נ בחברת וסיוע האל בבית הרב מו' ליאון השם
 יוכינו (sic) לחוציא לאור כל תעלומותיו ולהנצל ממצודת הוויף וההטעאות
 ולחיות לנו בצרי הגלעדי לרפאות כל חוליו נפשותינו ויביאנו למחוז חפצינו
 שמחים וטובי לב כתאוות לבינו אמן א"ם.

§ 5. RELATIVE VALUE OF MSS.

Of the four mss. mentioned above, the worst is Mn, used by Steinschneider. Next comes P, while O is very good and remarkably free from error. Of L, I cannot, after a very cursory examination, speak with authority. I compared it only for the passages omitted and interpolated in some of the other three, and found that it agreed with the best of them O, having neither omissions nor interpolation.

A more detailed report upon my collation of the mss. I shall reserve for another time, when I shall publish the work. Suffice it for the present to indicate the more important omissions and the interpolation of the inferior mss.

Mn has an interesting interpolation fol. 203 *b*, quoting Burleigh on the meaning of the difficult terms ציור ראשון ושני = "*conceptus primus et secundus*" as follows:

ובעבור כי הבנת ציור ראשון ושני הם קשי החשנה העתקתי לשון בורליאו
 חנה מלא באלה שציורי הדברים ואמר ב"ה (sic) פנים אל ציור ראשון ושני
 והמשל בזה נוכל לדעת מהאדם ציור אחד בו אל חשנה טבע האנושית
 בהחלט אל שבנשכיל (sic) אותו היותו עצם בעל נפש מרגיש מדבר ונוכל
 מהאדם (sic) ציור אחד מטבע האנושות בסדר לאיתו הדבר אשר ישתף

אותו הטבע דל לסקראט ואפלטון כפי זה יהיה לנו ציור אחר דל ציור שני לפי שהציור השני יופשט מהציור הראשון והציור הראשון יאמר כוונה ראשונה והציור השני יאמר כוונה שניה וזה הלשון העתיק כוירי מבורליאו אליו.

This is a quotation taken from Walter Burleigh's "Super Artem Veterem Expositio". The text of Burleigh, Venice 1509, fol. 2, is as follows: "Conceptus rei duplex est, sc. primus et secundus, v. g. possum enim de homine habere unum conceptum, quo concipio humanam naturam absolute, sc. intelligendo vel concipiendo ipsam esse substantiam animatam sensibilem rationalem et possum conceptum de homine habere, quo concipio naturam humanam in ordine ad illa, quae participant eandem naturam, sc. ad Socratem et Platonem et sic habeo alium conceptum, sc. conceptum comparatum qui dicitur secundarius conceptus et iste abstrahitur a conceptu primo. Conceptus primus dicitur prima intentio, conceptus secundus dicitur secunda intentio."

That this is an interpolation is proved, (1) because it is not found in the other mss. (2) It breaks into the middle of a sentence which, omitting the interpolation, reads as follows: ויותר נכון בנושא שיכלול הדברים וינשא עליהם כמה שיאמרו (here follows the above passage) בהצטרף אליו, i. e. "The subject (of a science) is more properly that which contains the matters (treated of in that science) and is (directly) *predicated* of them, than that in *reference* to which (merely) those matters are said." (3) It is altogether out of place, since the discussion in the immediately preceding context concerns, not $\text{ציור ראשון ושני} = \text{conceptus primus et secundus}$, but the proper subject of logic. The distinction between ציור ראשון and שני was stated on the preceding page, fol. 203, as follows: כי כאשר השיג האדם החיות ע"מ שהוא הציור הראשון ואחר כך יקחהו בערך אל מיניו ויראה שהוא יותר כולל מהם או יחבר השכל אל וזה הלשון (4) The words $\text{העתיק כוירי מבורליאו אליו} = \text{"These words my teacher translated$

from Burleigh", are the work of a pupil of the first interpolator. He would not have found it necessary to add this remark if the preceding passage were part of the body of the work, since at the beginning of that quotation the author himself tells us העתקתי לשון בורליאזי הנה = "I translated the words of Burleigh here". As it is, the object of the note of the pupil is that he may remember, and possibly others too, that it was his teacher who did it. The author of the quotation wrote it originally in the margin of his copy, which he used in common with his pupil; and it was the latter who added the last phrase. Later the whole passage found its way into the text.

Mn has three extensive omissions, all in the Categories. As none of the mss. has yet been published, all that is necessary at present is to indicate where the omissions are, for the benefit of those who may consult one of the inferior mss. Unfortunately I omitted to take down the pagination of P and O, so that all I can do is to give the folio numbers of Mn where the passages omitted in it are to be inserted; and if, as happens in one case, P has an omission which Mn has not, I give the folio numbers of Mn where the passage is to be found.

The first passage, quite a long one, omitted in Mn alone should be inserted f. 237 l. 8 after the word משהפסם. The second, omitted in Mn and P should be inserted f. 327 l. 8, after the word אני. The third, omitted in Mn and P, should be inserted f. 330 l. 22 after the word שאחר. Finally P alone omits a very long passage corresponding to Mn f. 331 b l. 16 שאינה etc. to f. 339 l. 20 מנחה incl., almost 18 pages.

§ 6. THE COMMENTARY.

As was said in the introduction, Aristotle, after the time of Maimonides, was not studied directly. There is scarcely

any Hebrew translation, direct or indirect, of the text of Aristotle. Of the Organon, it is safe to say that there never was any Hebrew translation of Aristotle's text. It was Averroes that was translated and commented on, and whenever the Jewish commentators of the middle ages speak of Aristotle, it is the text of Averroes that they have in mind. Thus Gersonides, who wrote notes to the commentaries of Averroes, says in the beginning of the Isagoge (Steinsch. *op. c.* 67), "I will also mention the places in which my view is different from that of Aristotle in this art, *according to the interpretation of Averroes*. In some places I will mention matters about which Aristotle did not speak, *according to what Averroes cites of his words*." The Italicized expressions seem to indicate that Gersonides knew of no surer way of approach to the ideas of Aristotle, than through the Hebrew translations of Averroes' commentaries; in this particular instance, the middle commentary on the Organon. This leads me to agree with Joël (Beiträge etc., Lewi ben Gerson, p. 5), Steinschneider (*op. c.* p. 66) to the contrary notwithstanding, that Gersonides did not know Latin, for had he known it, thorough scholar that he was, he would certainly have made use of the Latin translations of Aristotle, of which there were several in his day, and would not show, as he does, an absolute dependence on the Hebrew translations of Averroes ¹.

That at least in the Categories he did not make use of any Latin text of Aristotle, is proved even more directly by the fact that nowhere in his commentary on that book does he make mention of such, or in any way betray any knowledge of the existence of such a text, although the variations in reading and interpretation between the two, as we shall see later, not only must have given him ample occa-

¹ See below, p. 97, note.

sion to speak of the Latin text, but must have necessitated his taking it into account if he knew of its existence.

Messer Leon a century later, was under the same disadvantage as far as a Hebrew text of Aristotle was concerned. He had none. He was writing a commentary in Hebrew, for Hebrews, and was obliged to use a Hebrew text for the basis of his work. Having no text of Aristotle proper, he had to use the Hebrew translation of Averroes' middle commentary to the Organon. The translation which was classic in those days was that of Jacob ben Abba Mari ben Anatoli, commonly known as Jacob Anatoli. He was a son-in-law of Samuel Tibbon of the famous family of translators of south France. In 1232, he completed in Naples the translation into Hebrew of the middle commentary of Averroes to the following works. (1) Isagoge; (2) Categories; (3) Interpretation; (4) Prior Analytics; and (5) Posterior Analytics; or as they are commonly known in Hebrew, (1) מבוא, (2) מאמרות, (3) מליצה, (4) היקש, (5) מופת. This was the text used by Gersonides, and Messer Leon used the same. To quote his own words (fol. 204), "the efficient cause of this book, i. e. the Isagoge, was Porphyry the philosopher . . . , of the other books, Aristotle; only that the text is intermixed with some of the words of Ben Roshd by way of interpretation, as I shall explain." אמנם הסבה הפועלית אם מזה הספר ר"ל המבוא היה פורפיריאוס הפילוסוף . . . ואם מיתר הספרים היה ארסטו אלא שהמאמר מעורב עם קצת דברי ב"ר עליהם על צד הביאור כאשר אבאר.

We see here an advance on Gersonides in the attempt to distinguish Aristotle from his "commentator". Naturally this can not be done except by referring to another text which contains the words of Aristotle without any "admixtures"; and as there was no such work in Hebrew, he had to have recourse to the Latin, which he uses to correct the

Hebrew of Averroes, assuming that the latter too is a translation of Aristotle, but with explanatory notes interspersed. In fact the middle commentary to the *Isagoge* and the *Categories*, especially the former, is scarcely more than a more or less close paraphrase of the original, and this probably accounts for the circumstance that until recently it was believed by historians of philosophy that Averroes made a translation of Aristotle.

In the *Interpretation* the thought becomes more complex and Averroes departs from the text "by way of explanation" further than in the two preceding books, so that Messer Leon finds himself obliged to give up the attempt to distinguish Aristotle from Averroes (fol. 348 b), ואי אפשר בזה הספר שיבוררו הספורים ויאמר זה לשון ארסטו וזה לשון ב"ר כי הם כלם מעורבים ולא תתכן הברירה בו כמו שעשינו מלפנים.

In his preface, Messer Leon assigns as the motive for writing the work, the want of books of this character in the Hebrew language, and the unsatisfactory character of those commentaries that had been composed before him. Seeing that in the other languages the number of such works was very great, he could not refrain from undertaking to write a commentary on the *Isagoge* of Porphyry and some of the logical works of Aristotle, which should contain in as brief a style as is consistent with clearness, the best of the thoughts of former commentators and some original ideas of his own. He anticipates a great deal of criticism on the one hand from the conservatives who find nothing wrong or useless in his predecessors because they are old, and on the other hand from those who, by reason of a lack of proper education, judge others by themselves and hence impute to him low motives, conceit and love of glory. This, however, will not prevent him from offering his best to the cause of science, strong in his consciousness of sincerity.

Inasmuch as according to Aristotle all limitation, arrangement and division pertains to form, and their absence to matter; and it is best to follow form, which is the source of perfection, he will be careful to follow the proper order in his exposition, and divide the paragraphs into sections and those again into smaller ones, so that the thought of the author may be perfectly clear. At the end of each section he will discuss some of the "doubts" pertaining to it, and solve them to the best of his ability.

Every product, continues Messer Leon, be it natural or artificial, in order to change from the potential to the actual, must have four causes, viz. material, efficient, formal, and final. Logic being no exception to this rule, he proceeds to discuss the four causes of this art; which will make clear the *subject* of the science and its *utility* — two points, the discussion of which is in place in a preface.

This formal way of treating the subject of logic, is with more or less variation as old as the Greek commentators. (See Prantl, Geschichte der Logik, XI, p. 649, Anm. 140—1; p. 681).

(1) Material Cause: This is the same as the subject of logic, which Messer Leon explains as follows: (f. 203).

אמנם הסבה החומרית היא הצורות השניים מחוברים אל הראשונים כמו שיאמר אבן סינא כי היא תחקור מהסוגים והמינים וזולתם מן הכוללים ומהשם והפועל והמילה וההקדמה וההיקש והנוהג מנהגם שהם כלם צורות שניים נמצאים דבריים מחוברים אל הצורות הראשונים כי כאשר השיג האדם החיות עֲדָם שהוא הצור הראשון ואחר כך יקחהו בערך אל מינו ויראה שהוא יותר כולל מהם או יחבר השכל אל הצור הזה הראשון צור שני ויקראהו כוג אשר החקירה בו בזאת המלאכה והנה יתחייב מזה שנושא ההגיון הוא הנמצא הדברי כי כל מה שיאמר בזאת החכמה או הוא נמצא דברי כמו ההקדמה וההיקש והנוהג מנהגם או יאמר בערכו כמו העצם וזולתם שהוא אמנם תחקור עליהם מצד מה שהם סוגים עליונים ובכלל מצד מה שהם נמצאים דבריים כאשר נבאר בֵּעֵה במקומם המיוחד וזה מתנאי הנושא דֵּל שכל מה שיאמר בחכמה החיה נכלל תחתיו או יאמר בערכו.

"The material cause is the 'secondary concepts' joined to the 'primary', as Avicenna says, for it (sc. logic) treats of genera and species and the other universals; and the noun and the verb and the particle; and the proposition and the syllogism, etc.; which are all 'secondary concepts' and 'logical existents' joined to the 'primary concepts'; for when one has apprehended animal nature for example, which is a 'primary concept', and then takes it in relation to its species and finds that it is more general than they, then the mind joins to this 'primary concept', a 'secondary concept', and calls it genus; which is the subject of investigation of this art. It follows, therefore, from this that the subject of logic is the 'logical existent'; for all that is said in this science is either a 'logical existent', as proposition, syllogism, etc. or is said in relation to it, as substance, and so forth; which latter, logic investigates in so far as they are highest genera, and in general in so far as they are 'logical existents', as we shall explain with the help of God in the proper place. And this is the requisite condition of the subject (of a science), viz. that whatever is said in that science shall be included under it (sc. the subject), or be said in relation to it." (cf. Arist. 1003 *b* 12—15).

The terms *שני ראשון* and *נמצא רברי* rendered by 'primary' and 'secondary concept' and 'logical existent' respectively, correspond to the 'intentio prima' et 'secunda', and 'ens rationis' of the scholastic writers. By intentio prima is meant the concept directly abstracted from external objects, and directly referring to them, like the concepts of man, substance, etc. Intentio secunda is the more general concept abstracted from the primary by comparing the latter with one another in respect to generality. The clearest statement of the meaning of these terms is that of Walter Burleigh (*op. cit.* fol. 2). "Videndum est, de quibus est

logica, utrum de rebus aut de conceptibus aut de vocibus, et quid debet esse subiectum in logica. Et est dicendum secundum Avicennam, quod logica est de intentionibus secundis adiunctis primis. Ad cuius evidentiam sciendum est quod intentio secundum quod nunc loquimur, est idem quod conceptus rei, et conceptus rei duplex est, sc. primus et secundus, v. g. possum enim de homine habere unum conceptum, quo concipio humanam naturam absolute, sc. intelligendo vel concipiendo ipsam esse substantiam animatam sensibilem rationalem, et sic habeo unum conceptum solum primum, et possum conceptum de homine habere, quo concipio naturam humanam in ordine ad illa quae participant eandem naturam, sc. ad Socratem et Platonem et sic habeo alium conceptum, sc. conceptum comparatum qui dicitur secundarius conceptus, et iste abstrahitur a conceptu primo. Conceptus primus dicitur prima intentio, conceptus secundus dicitur secunda intentio. Unde prima intentio est conceptus immediate abstractus a rebus. Sed secunda intentio est conceptus abstractus a conceptu primo vel a conceptibus primis. Nomina enim rerum existentium extra animam sunt primae intentionis, ut homo, animal, albedo, nigredo, sed conceptus abstracti ab istis significantur per nomina secundae intentionis, ut genus, species, subiectum, praedicatum et huiusmodi. Unde breviter prima intentio est primus conceptus rei, secunda intentio est secundarius conceptus rei. Nomen primae intentionis est nomen significans rem ut cadit sub primario conceptu intellectus. Nomen secundae intentionis est nomen significans rem ut cadit sub secundario conceptu. Et ex his patet eandem rem esse primae intentionis et secundae intentionis; quia eadem res potest apprehendi sub primario conceptu intellectus et secundario, cum tamen prima et secunda intentio non sunt eadem; dico ergo quod logica est de rebus secundae intentionis, ut sunt secundae inten-

tiones, quia in logica non determinatur de rebus nec de vocibus nisi per habitudinem ad intentiones secundas. Non enim determinatur in logica de homine nisi inquantum est species, vel subiectum vel praedicatum propositionis; vel inquantum est terminus in syllogismo, sc. inquantum est maior vel minor ex terminis, vel medium in syllogismo. Similiter non determinatur de vocibus in logica nisi inquantum significant res, ut eis insunt intentiones secundae sive ens rationis, et non est aliud intelligendum per ens rationis, quam res secundae intentionis."

It will be seen from the above that Messer Leon is at one with Walter Burleigh as to the subject of logic, and also in identifying 'ens rationis' with 'intentio secunda'. Nay it would even seem, though this is by no means certain, that it was from Burleigh that Messer Leon borrowed the terms. For it will be noticed that the ordinary terms as used in the schools are *intentio* prima et secunda, the Hebrew equivalent of which is not צִיּוּר, which Messer Leon has, but כּוּוּנָה. Burleigh, as will be seen from the passage quoted above, explains 'intentio' by the word 'conceptus', which corresponds to the Hebrew צִיּוּר, constantly used by Messer Leon.

The author then goes on to discuss other views as to the subject of logic, namely that it is the syllogism, and comes to the conclusion that the 'ens rationis' is the more uniform (דרך השווי והכללות) = *subiectum adaequatum contentivum* of Burleigh) subject of the science, but that in a sense it may also be said that the syllogism is the subject, and especially the demonstrative syllogism; herein also agreeing with Burleigh (*op. cit.* fol. 2 b), "Si autem loquimur de primo subiecto in logica primitate principalitatis (= דרך הראשיות והתכליות of Messer Leon), sic dico quod subiectum primum in logica est syllogismus demon-

strativus, quia eius notitia principaliter inquiritur in logica, vel secundum alios syllogismus est hoc modo primum subiectum in logica."

(2) Efficient Cause: — This is for the Isagoge, Porphyry; for the other books, Aristotle with explanatory admixtures of Averroes.

(3) Formal Cause: — This is two-fold. First, the external form of the work, viz. the chapters and sections of which it is composed, and into which it may be divided. This will appear in the sequel. Second, the internal form of the work, or the method of procedure. This is again five-fold. 1st. Subdivision and classification of ideas. 2nd. Definition and description. 3rd. Interpretation and argumentation. 4th. Refutation of erroneous views. 5th. Illustration for the purpose of making the thought clearer.

(4) Final Cause: — This is also two-fold, proximate and remote. The proximate purpose is to know the methods of demonstration in matters not doubtful. The remote purpose is to learn to distinguish truth from falsehood in all matters of knowledge.

Like Burleigh ¹ he insists on the importance of the study of logic. Although the originator of the science had it by nature and use (מצד הטבע והרגל = *usualiter* of Burleigh), and there are a great many persons clever by nature, still to argue with art (דרך אימנה = *artificialiter* of Burleigh) is not possible without a study of logic; for he who arrives at a result in this way, viz. *artificialiter* (באימנה ובקנין), has

¹ (fol. 2b): "Si autem dicitur quod ille qui primo invenit logicam inquisivit hanc scientiam sine logica, et per consequens potest scientia acquiri sine logica ... sciendum quod logica potest haberi dupliciter, sc. usualiter vel artificialiter ... dico ergo quod primus inveniens logicam habuit logicam usualem antequam fuerit logicus artificialis. ... Dicendum quod nulla scientia potest haberi artificialiter absque logica, quia quicumque scit artificialiter aliquam conclusionem scit se scire illam."

the advantage of *knowing* that he has obtained a proof.

With regard to the character of logic, his view is that of Duns Scotus (Prantl, *op. cit.* XI, p. 205, *Anm.* 90) and Aegidius Romanus (*ibid.* p. 259, *Anm.* 368) that it is both a science and an art, or organon of knowledge. As a science it produces the organon, which is the art (fol. 209).

Having stated the subject of logic in general to be the **סיוורם שניים** or 'conceptus secundi', he assigns in various parts of the work the more limited subjects of the individual books of the Organon as follows.

The Isagoge of Porphyry deals with the universal, without deciding whether it exists *extra animam* or not; and Messer Leon, apparently not at this time intending to treat of the subject in the Categories, asks the reader to wait until he comes to the De Anima or the Metaphysics (fol. 206).

The subject of the Categories offers Messer Leon some difficulty, and he grows impatient with those who hold the extreme views, (1) that the book deals with external things; (2) that it deals with mere sounds. Since the book is a part of the science of logic, and logic is concerned with 'secondary concepts', the Categories too must in some way be related to these. The categories *per se*, it is true, are not secondary concepts but primary concepts, referring directly to things through the mediation of words, but it is not of the categories *per se* that this logical work treats. That is rather the business of the Metaphysics, and it is only an accident that the book on the categories concerns itself with words, as being the medium of communicating these notions. The real subject of the Categories is the ten categories as related to the secondary concepts, i. e. as highest genera with species under them, and as possessed of attributes (fol. 235 b).

In this also he is remarkably close, even in the form of

expression, to the view expressed by Burleigh, as can be seen from the following parallel. (fol. 235 *b*) ... ואנחנו נבאר זה ... שהחקירה בעצם ובכמה ובזולתם מצד מה שהם סוגים עליונים וימצאו תחתיהם סוגים ממוצעים ומינים ויחקור על סגולותיהם גם כן כי הסגולה היא אחת מן הנשואים החמשה ... (*ibid.*) הפילוסוף ידבר בו מן המאמרות העשרה ומשיניהם שהם דברים חוץ לשכל בהצטרף אל הצוירים השניים.

Now see Burleigh (fol. 17 *b*), "Dico ergo quod liber prae-dicamentorum est de rebus, secundum quod eis insunt intentiones secundae, sc. intentio generis generalissimi et generis subalterni et intentio speciei et sic de aliis."

The subject of the Interpretation is the judgment or enunciation (גורָה = *enunciatio* = ἀπόφασσις). (fol. 341) וראוי שהדע שהנשוא המיוחד לזה הכפר הוא הגורָה כי כל מה שיאמר בבאן יאמר בערך אליה.¹

He quotes also without comment the view of Boetius שהפילוסוף הוא מספר הנה ובספר המאמרות על בחינות מתחלפות מהקולות הפשוטים כי במאמרות ידובר בהם מצד שהם שמות הדברים ובוה הספר (*ibid.*) i. e. "that the philosopher deals here and in the Categories in different ways with simple sounds; viz. that in the Categories they are treated of as names of things, and in this book as names of names, viz. of the noun and the verb, etc."

The words of Boetius are as follows (*In Categ.* ed. Migne, 163 A). "Sed hoc interest, quod illic (sc. in Perihermenias) figuras vocabulorum dividit, in hoc (sc. in Categoriis) de significationibus tractat"².

This division of words into 'prima' and 'secunda positio', defined by Boetius (*op. cit.* 159 C) "Et est prima positio, ut nomina rebus imponerentur, secunda vero ut aliis nominibus ipsa nomina designarentur", and called by Messer Leon (fol. 341) הסבמה ראשונה ושניה, goes back to the Greek

¹ "Iste liber (sc. Perihermenias) ... est de enunciatione tamquam de subiecto", Burleigh, *op. cit.* f. 64 *b*.

² cf. below pp. 71, 76.

commentators, who make a three-fold division of — *πράγματα*, *πρώτη θέσις τῶν ὀνομάτων*, and *δευτέρα θέσις τῶν ὀνομάτων*. *πρώτη θέσις* includes words directly denoting things, like man, horse, etc. *δευτέρα θέσις* has reference to grammatical terms like noun, verb, etc., which apply to words *πρώτης θέσεως*. The former, i. e. words or ideas *δευτέρας θέσεως*, form the subject of the *Perihermenias*, the latter of the *Categories* (cf. Porphyrius, *In Categ., Comm. in Arist. Graeca*, ed. Busse, Berolini 1887, pp. 57—8).

Of the subjects of the other books of the *Organon*, he speaks only in passing, in the preface to the *Categories*. (fol. 235) בהיות הנמצא הדברי נושא לזאת המלאכה בכללה ומדרך הידיעה (fol. 235) בענינים הפשוטים שתקדם אל הידיעה בענינים שהורכבו מהם שם הפילוסוף ראשית זאת החכמה החקירה בדברים הפשוטים אשר יחקור בהם בזה הספר עוד ילך בהדרגה ויחקור מחלקי ההקדמות וההקדמות בספר שאחר זה ובספר השלישי ר"ל ספר החיקש יבאר עניני החיקש אשר הוא מורכב מהקדמות ויען החיקש בסתם הוא קודם לחיקש המופתי והנצוחי וזולתם למה שכל חיקש מופתי או נצוחי הוא חיקש ולא יתהפך, ביאר קודם כל תנאיו וצבאיו ופקודיהם ואחרי כן יתפש דרכי החיקשים המיוחדים למיניהם ויתחיל מהותה נכבד ר"ל מהחיקש המופתי אשר התבאר ענינו בספר המופת ואחרי כן בחיקש הנצוחי הקרוב אליו באמת בספר החמשי ובספר ההטעאה יודיע אופני ההטעאות והזיופים ר"ל עניני החיקש ההטעאי אשר הוא למטה במדרגת נתינת ההספקה מהנצוחי ויעתק מזה אל הספורים הערבים והחקויי אשר יתבאר ענינם בשני ספרים ר"ל הלצה ושיר ובין שורותם יצהירו החיקש ההלציי והשיריי.

"Inasmuch as the *ens rationis* is the subject of this work in general, and knowledge of the simple properly comes before knowledge of the complex, the philosopher investigates in the beginning of the science the simple things. Then he advances gradually and investigates in the book following this one, the elements of the judgment, and the judgment; and in the third book, i. e. the *Prior Analytics*, he explains the syllogism which is compounded of judgments.

Now since syllogism in general comes before demonstrative or dialectical or any other kind of syllogism, as every demonstrative or dialectical syllogism is a syllogism, whereas the converse is not true; he explains first of all the general conditions of the syllogism; and afterwards he investigates the various kinds of syllogism, and begins with the highest, viz. the demonstrative, which is treated in the Posterior Analytics. Then he takes up the dialectical syllogism, which is closely related to the former, in the fifth book; while in the book of "Refutations", he explains the various refutations and fallacies, viz. the sophistical syllogism, which is inferior in conclusiveness to the dialectical. Then he proceeds to a treatment of aesthetic and mimetic writings, which are considered in two books, the Rhetoric and the Poetics; between the lines of which shine forth the rhetorical and poetical syllogisms."

§ 7. METHOD OF MESSER LEON.

Messer Leon then takes up the Hebrew text of Averroes paragraph by paragraph, divides each into still smaller sections and explains the meaning of difficult phrases, pointing out the sequence of thought by assigning each statement in the text of Averroes its place in an implied syllogism which he gives in full, and taking care to distinguish Averroes' additions from Aristotle's own words by making use of a Latin translation of Aristotle¹. Like Burleigh and others before him, he calls attention to the important 'conclusions' (תולדות) as they occur. Thus (fol. 210) הראשונה שזאת היא התולדה וראוי שתדע שזאת היא התולדה (fol. 210) הראשונה המבוארת בזה הספר כל שהסוג הוא הנשיא וכו'. At the end of each chapter or section, he discusses in strict syllogistic form some of the disputed points pertaining to the section in question, which he introduces with the words וראיתי להביא

¹ See below p. 81, note 8.

בוה ספק אחר. The entire work contains twenty nine discussions of this nature, of which ten are in the Isagoge and the rest in the Categories. Strange to say, there are none in the Interpretation. Following is a list of the ספקות with the number of the folio of ms. Mn in parenthesis ¹.

אם הכללי הוא הנושא השווה לזה הספר ר"ל ספר פורפיריאוס (207 b ff.)

"Whether the 'universal' is the uniform subject of the Isagoge of Porphyry."

אם ההגיון היא חכמה (208 ff.)

"Whether logic is a science."

אם הסוג והמין הם ממאמר המצטרף (211 b ff.)

"Whether genus and species belong to the category of relation."

אם ראוי שנקח אחד מן המצטרפים בגדר חברו (212 b ff.)

"Whether it is proper to use one of two correlatives in defining the other."

אם רושם המין אשר אמר בו שהוא הנשוא על רבים וכו' הוא (213 b ff.)

רושם אמתי למין המיונים

"Whether the description of species given by Porphyry, viz. 'that which is predicated of many, etc.', is a true description of the lowest species."

אם המדבר סוג לאדם ולמלאך (214 ff.)

"Whether 'rational' is the genus common to man and angel."

אם הנמצא הוא סוג לכל המאמרות העשרה (216 b ff.)

"Whether 'existent' (= τὸ ὄν) is the common genus of the ten categories."

אם הפרטים הם מאין תכלית (217 b ff.)

"Whether particulars are infinite in number." This depends, he says, on one's belief as to the origin of the world.

אם זה הרושם ר"ל שהמקרה הוא אשר ירומה וכו' הוא רושם (225 b ff.)

אמתי למקרה

"Whether the definition of accident is a true one."

¹ See below p. 81.

(227 ff.) אם הנשואים הם חמשה לבד שלא יהיו לא פחות ולא יותר

"Whether the 'predicables' are five, not more and not less."

(238 ff.) אם המשתתפים הם מסכמים וכן להפך

"Whether homonyms are synonyms, and vice versa."

(240 b ff.) אם מה שאמר מענין העצם שהוא אינו בנושא יתהפך עמו

כהתהפך הסגולה עם נושאה דל שיצדק כל מה שאינו בנושא הוא עצם
וכן להפך

"Whether what was said of substance, viz. that it is not in a subject, is convertible with substance as a property is convertible with its subject, i. e. is it correct to say that whatever is not in a subject is substance, and vice versa?"

(246 ff.) אם האל ית' והחומר והצורה הם במאמר מצד עצמם

"Whether God and matter and form are in a category in essence."

(247 ff.) אם המלאכים הם במאמר העצם

"Whether the angels are in the category of substance."

(248 b ff.) אם הכללים הם בשכל לבד

"Whether the universals are only in the mind." This is a lengthy discussion on the question of nominalism and realism.

(266 ff.) אם העצם יש לו הפכי

"Whether substance has an opposite."

(268 ff.) אם העצם מקבל הפחות והיותר

"Whether substance admits of more and less."

(273 b ff.) אם הכמה הוא סוג אחד

"Whether quantity is one genus."

(275 ff.) אם הכמה נחלק לשבעה מינים

"Whether quantity is divided into seven species."

(285 b ff.) אם יש לכמה הפכי

"Whether quantity has an opposite."

(291 ff.) אם זה המאמר (דל מאמר המצטרף) יש לו סוג אחד עליון

"Whether the category of relation has *one* highest genus."

(292 ff.) אם הצירוף הוא ענין מתחלק לחוף עניני מן הדבר אשר יוסד עליו

"Whether relation is different essentially from the thing

upon which it is based." This is an important discussion, and is related to the previous one on the nature of universals.

אם החשיבות הוא הפך הפחיתות (301 b ff.)

"Whether virtue is the opposite of vice."

אם החשיבות והפחיתות הם מצטרפים (ibid.)

"Whether virtue and vice are correlatives."

אם המצטרפים הם הפכים (ibid.)

"Whether correlatives are opposites."

אם כל המצטרפים הם יחד בטבע (304 ff.)

"Whether all correlatives are ἀμὲν φύσει."

אם בהעלות הידוע תעלה הידיעה (305 b ff.)

"Whether the removal of the ἐπιστητόν removes ἐπιστήμη."

אם ההערר הוא דבר מה נמצא חוץ לשכל (322 ff.)

"Whether 'privation' is a thing existing apart from the mind."

אם כל הקדמה היא מתחפכת עם ההקדמה החיה בעצמה כאשר האמת יקויים ממנה

"Whether every proposition is convertible with that same proposition if we assume it true."

His method in discussing these *dubia* is the strictly scholastic one of the "Summa Theologiae" of Thomas Aquinas and the other Schoolmen (See Schneid, Aristoteles in der Scholastik, 51 f.; also Prantl, XIX, p. 277, *Anm.* 447). He first states the question or doubt (= *quaestio* = *dubitatio* = *dubium* = ספק) in the form given above, viz., to cite a particular instance, *אם ההגיון היא חכמה*; he then states the view opposed to his own, introducing it usually with the words *ובתחלת המחשבה יראה*. Thus in the case mentioned above, *ובתחלת המחשבה יראה שלא יהיה חכמה*. This is demonstrated in syllogistic form, the major and minor premisses, unless self-evident, being supported by quotations from the writings of Aristotle. Thus: *ויסודר ההיקש*: ככה ... ההיקש הוא ברביעי מהתמונה הראשונה והגדולה מבוארת מספר המופת והקטנה מפורסמת ממקומות רבים מוזאת המלאכה. Then follows a statement of the opposite view, which is that of the author,

This is again demonstrated syllogistically as before with support of major and minor premisses, and finally he proceeds to answer the arguments cited in the first place in favor of the contrary view, invalidating major, minor or conclusion.

ונשוב אל הראיות המבארות חלוף זה ונשברם כשבר נבל יוצרים אם אל הראיה הראשונה נשוב ... ואל דברי הפילוסוף אומר ... לכן בהתחייבות הנעשה בזה אודה בקודם ובנמשך ... וזה אינו מקביל לכוונתנו ... ואל הראיה השנייה אשוב ... ולפי זאת התשובה אכחיש הקטנה מן ההיקש ... ואפשר גם כן שנשיב באופן אחר ... ולפי זאת התשובה אכחיש הגדולה מן ההיקש.

A good specimen of his method of pointing out the sequence of thought in his text by formulating the latent syllogism in the mind of the writer is found fol. 303 ff., in reference to Categ. 7^b 22 ff., especially lines 27—30 and 37—39.

ועוד כשנעלה האדם וכו' הוא החלק העשירי וכאילו ביאר בזה מה שהונהג שבהעלות הידיעה לא יעלה הידוע כי אם לא ימצא האדם לא תמצא הידיעה והנה יהיו דברים רבים ידועים ... וזה הספק בעצמו וכו' הוא החלק הִיא באשר יבוא שהמוחש נֶכֶּץ קודם לחוש כאשר אמר בידוע בערך אל הידיעה כי כבר יחשב שהמוחש כו' הוא יבאר זה והוא התולדה המבוארת הנה וכאלו רצה לעשות ההתחייבות שנעשה מהידיעה והידוע רָץ שזה ההתחייבות צודק המוחש הוא בלתי נמצא אֵל החוש הוא בלתי נמצא ולא יתהפך כי לא יצדק החוש הוא בלתי נמצא אֵל המוחש הוא בלתי נמצא אמנם יחויב כו' הוא החלק הִיב כאשר יבאר ההתחייבות הראשון שאם אין שום מוחש נמצא אֵל הגשם אינו נמצא, הגשם אינו נמצא אֵל החי אינו נמצא, החי אינו נמצא אֵל החוש אינו נמצא והנה התבאר מן הקודם אל המתאחר שאם המוחש אינו נמצא החוש אינו נמצא אבל כשנעלה ההרגש הוא החלק הִיב כאשר יבאר ביטול ההתחייבות השני למה שמקביל הנמשך לא יתחייב מקביל הקודם שאם המוחש נמצא לא יתחייב מזה שהחוש נמצא לכן אמר זה המאמר שיעלה המורגש בהעלות ההרגש שהיה ההתחייבות השני אינו צודק למה שהגשם המורגש נמצא שהוא מקביל הנמשך ואם לא ימצא ההרגש שהוא הקודם והנה מקביל הנמשך והקודם יעמדו יחד שהוא זולת מה שיתחייב להתחייבות הטוב כאשר התבאר בקיצורי ומה שאמר כמו הגשם

החם והקר נתן בזה המשל למורגש שאפשר המצאו קודם ההרגש ועוד כי ההרגש ימצא כו' הוא החלק ה'ר באשר יבאר ביטול ההתחייבות שהוא באופן אחר וכאילו יאמר החלקים המרכיבים הענין הם קודמים לו ויתחייב מזה שהמים והאש ושאר היסודות שהם מרכיבים החי יקדמו לו ואז אקיש כן כל מורגש מרכיב החי הוא קודם לחי והמים והאש והעפר ושאר היסודות הם מורגשים מרכיבים לחי א"כ הם קודמים לחי ההיקש מבואר עם ההקדמות. עוד אקיש כל הקודם לחי קודם להרגש והמורגשים הנזכרים קודמים לחי א"כ קודמים להרגש ההיקש הוא בשלישי מן הראשונה והקטנה מפירסמת כמה שקדם והגדולה היא מבוארת בעצמה שההרגש הוא נולד עם החי ואינו קודם לו ומה שאמר כי ההרגש ימצא עם מציאות החי הוא ביאור הגדולה מזה ההיקש האחרון ומה שאמר שהמורגש ימצא קודם מציאותו היא הקטנה מזה ההיקש האחרון ומה שאמר כי האש והמים ושאר היסודות וכו' היא הקטנה מן ההיקש הראשון ומה שאמר הם נמצאים קודם שימצא החי היא הגדולה מן ההיקש הראשון ומה שאמר ולזה כבר יחשב הוא תולדה מזה ההיקש האחרון.

Other logical phrases are :

ביאר הקטנה בחי פוש (induction) בזה האופן. יתחיל לבאר המבוקש בהבאה אל הביטול (*reductio ad absurdum*).

ובזה החלק מביא הבטל הראשון המתחייב מהנחת המנגד ... והשמיט בזה המקום מקביל הנמשך

ההתחייבות מהמצטרף לקוח בהגבלה, אליו בעצמו לקוח מבלי הגבלה הוא צידק

"Inference from a correlative taken with a limitation to the same correlative taken without limitation is correct." For example, if it is true that A is the son of B, it is true that A is a son.

ומזאת ההנחה יתחייב ... א"כ ההנחה שקרית

מושכל ראשון = first principle or axiom

הדברים השווים לאחר הם ג"כ שווים בעצמם etc. etc.

§ 8. INTERESTING POINTS IN THE COMMENTARY.

It is clear that Messer Leon did not know Greek; for else he would not have made some of the errors which I shall point out later. That he did not know Arabic is equally

clear from a number of instances. Thus, to name one, the Hebrew term for "Peripatetic" is a word bodily taken from the Arabic. משאים is the Arabic مشاء fr. مشى to go on foot. Messer Leon (fol. 206b), not knowing that משאים is a foreign word, derives it from ארץ שואה ומשוואה in the sense of desolation, and explains it as applied to the followers of Aristotle, "who used to wander through deserts and from place to place to seek seclusion in order to acquire wisdom." ¹ (206b) שהיו הולכים במדברות וממקום למקום להתבודד ולחשיג החכמה. That he should not have not known the meaning of "Peripatetic" is strange, as he knew Latin and was a student of Cicero; having written a rhetoric based on the writings of the Roman orator. In the Posterior Academics I, 4, 17, the latter explains the term ².

¹ This explanation of the term משאים Messer Leon must have borrowed from Profiat Duran or, as he is more generally known, Ephodi. The latter, a century before Messer Leon, in his commentary on Maimonides' "Guide to the Perplexed" pt. II, *init.* gives the same etymology of משאים as Messer Leon, פילוסופים הראשונים שהיו הולכים במדברות ובמקום שואה ושמומה ללמוד חכמות ארסמו' וידעת הנמצאות.

Jacob Anatoli (cf. above, p. 12) in his translation of Averroes' middle commentary on the Isagoge uses the term משאים, and adds by way of explanation רל' הולכים בזכרו — "who walk in his memory". רל' הולכים is a literal translation of משאים, and בזכרו seems to be an explanatory addition of Anatoli signifying that they were called Peripatetics in the sense of being 'walkers' or followers of Aristotle. Samuel Ibn Tibbon in the glossary of technical terms attached to his Hebrew translation of Maimonides' "Guide" says ופי' משאים הולכים, כי היו לומדים והם הולכים חוץ למדינה לא יושבים, כדי שיתעמלו בהליכה לשמירת הבריאות.

Here too הולכים is the literal translation, and the rest is a conjectural explanation — they walked out of the country while studying, as an exercise for the health. Anatoli and Ibn Tibbon both knew Arabic, and hence did not, in their search for an explanation of the title, go beyond what may be reasonably inferred from the literal translation of the Arabic משאים = walkers. Profiat Duran, not knowing Arabic, thought that משאים was a Hebrew word, and explained it accordingly, by combining the הולכים of Anatoli and Ibn Tibbon with שואה, from which he thought משאים was derived. Messer Leon, likewise ignorant of Arabic, could do no better than follow Duran (cf. Steinschneider, Al-Farabi, p. 195, note 15).

² "Peripatetici dicti sunt quia disputabant inambulantes in Lycio."

The influence of Cicero, too, whether direct or indirect is seen in his division of ancient philosophers into three schools, according to their idea of the "summum bonum".

(1) The Stoics, who found the chief good in personal and political virtue. To this sect he assigns Seneca, Socrates, Tully (Cicero), and others.

(2) The Epicureans, followers of Epicurus, in whose opinion perfection consisted in eating, drinking, rejoicing, and in material enjoyment generally.

(3) The Peripatetics, Aristotle and his followers, who regarded perfection as consisting in theoretical speculation and contemplation of the Deity.

(fol. 206b) ואין ראוי שיעלם שהיו ג' כתות מהפילוסופים כת אחת רואה שהשלמות התכליתי הוא במדות ובהנהגה המדינית והיו אלה דורשים לרבים על פתחי שערים לחכמים האנשים בברית ההנהגות המעולות כמו סיניקא סקרט וטוליא וזולתם והיו נקראים טוייצי, והכת השנית תחשוב שהשלמות הוא לאכול ולשתות ולשמות ובכלל להנות בדברים הגשמיים לבד ואנשי זה הכת היה אפיקורוס וסיעתו ונקראו על שמו אפיקורסים, והכת הג' תחשוב שהשלמות הוא בהתבונן במושכלות ובעניני האל ית' להשיגו השיעור האפשרי ומה הכת היה ארסטו וחביריו ונקראו כת המשאים מלשון ארץ שואה ומשואה שהיו הולכים במדברות וממקום למקום להתבודד ולהשיג החכמה.

§ 9. NOMINALISM AND REALISM.

Messer Leon devotes considerable space to the discussion of the nature of universals (fol. 248b—260b). Apropos of the *δεύτερη οὐσία* of Aristotle, he apologetically introduces the question, though not strictly pertaining to logic; following in this the example of many commentators who discussed the matter in this connection. He names five opinions on the subject, the last of which is his own.

First, there is the opinion of the extreme nominalists, who maintain that the only existent *extra animam* is the

particular; while genera and species are not real *עצמות*, but are such in word only (*במאמר לבר*). Twenty reasons are given by these authors to prove their thesis.

Then follows the view of the extreme realists who say that the universals are found only *extra animam* and in the particulars. Thirty four arguments are given in favor of this view, a number of which are taken from Walter Burleigh, who was more or less of a realist (see Prantl, *op. cit.*, on Burleigh).

The third view is that of Plato, that the universals exist *extra animam* apart from the particulars, i. e. that they are essences or forms, abstract and eternal. He was led to this belief for two reasons: One is that he did not see how it is possible to have knowledge of any subject unless we make such an assumption; for knowledge is of the necessary, whereas the particulars constantly come into being and pass out of being, and change their states. The postulation of eternal essences makes knowledge possible. The second motive that led Plato to the ideas was spontaneous generation of worms and flies, which can be explained, since the cause must be of the same species as the effect, only by reference to the ideas as the cause similar in species to the product ¹.

Plato's ideas so understood, Messer Leon goes on to say, Aristotle has refuted in the *Metaphysics*; but whether Plato's view may be interpreted so as to agree with the truth, Messer Leon refers us to the commentary on the *Metaphysics* which he expects to write. Most commentators, he tells us, charge Aristotle with misrepresentation of Plato's thought, in order that he might pass for the head of philosophers. In hinting at a different interpretation of Plato's ideas, Mes-

¹ See below pp. 82—3.

ser Leon no doubt alludes to the opinion of St. Augustine, who was followed by Vincent de Beauvais, Guillaume d'Auvergne, Bonaventura, Henry of Ghent, Scotus, Franciscus Mayron, Durandus and others, that by the ideas Plato meant acts of the divine intellect. The charge against Aristotle of jealous misrepresentation of Plato seems to have been first expressed by Franciscus Mayron: "Sed quare Aristoteles voluit sic facere, una assignatur voluntas, quia habuit invidiam contra eum." (*In I Sent. dist. 47, Qu. 4*; cf. Schneid, *op. cit.* 89 ff.). It was then repeated in the fifteenth century by Cardinal Bessarion, Marsilius Ficinus and Pico di Mirandola. In modern times this new interpretation of the Platonic ideas has been advocated by Ritter, Stallbaum and Zeller (cf. Hauréau, *La Philosophie Scolastique I*, p. 64).

In the fourth place he cites a theory which stands midway between the two, and combines the "indifference" doctrine of Walter de Mortague, that the same thing may be both universal and particular according as one looks at it, with that of Duns Scotus, that the universal exists "materially" in the thing, and "formally" in the mind (cf. Prantl, *op. cit.* XIV pp. 139, 140 and *Anm.* 132; XIX, p. 207, *Anm.* 100).
(fol. 255 b) והכת הרביעית סוברת שהכללים אינם לא בשכל ולא חוץ

לשכל לבד אמנם הם בשכל בפועל וחוץ לשכל בכח לבד למה שהכוונה הכללית נתן לדברים באמצעות השכל והדבר אשר למענו יעשה הכללות בדברים אינו בדברים עצמם כי אם בנפש אבל עץ הכינוי הוא גם כן בדברים ואעפ"י שלא ינשא נשואות מוחותי על הענין כי אם הדבר שהוא מעצמותו מל"א אפשר שעל צד הכינוי והגזרה ינשא על הדבר הענין אשר איננו בו כאמרנו שהכלי הוא אנושי לא מהאנושות אשר הוא בו כי אם מהאנושות שהוא חוץ ממנו כי האנושות אינו בכלי ... וכן יבין ויען היות הדבר חוץ לנפש במציאות פרטי לא יקרא כללו מזה הצד כי אם מהחקירה השכלית שחוקר אותו השכל במציאות מופשט וכולל וזנה יקרא כללו על צד הגזרה החיצונית למה שהשכל הוא העושה הכללות בדברים כמו שיתבאר מדברי ב"ר והנה לפי מה שייחשבו אנשי זאת הכת הכללים הם חוץ לשכל במציאות חומרי למה שהצויר ההוא לקוח מהדברים בעצמם לפי מה שייחקרם

השכל במציאות מופשט והם בנפש בפועל ובמציאות צוריי למה שהשכל מצייר אותם ונותן להם המציאות ויהיה לפי זה אדם אחד בעצמו מין וסוג כפי חלוקה הפשטות כי אם יקחהו באופן מופשט מן הפרטות לבד יהיה מין ואם יקחהו באופן יותר כולל ומופשט אף מהכדלי המינים יהיה סוג וא"כ כל דבר חוץ לשכל הוא פרטי עם היותו כללי בכח ולפי החקירה השכלית הוא כללי בפועל ...

"A fourth opinion is that the universals are not purely a product of the intellect, nor have they an existence altogether independent of the activity of the mind. They are in the mind "actually", outside of the mind "potentially" only. For the notion of generality is given to things by the intellect, and that by virtue of which generality takes place in things is not in the things themselves but in the mind. Only by way of "epithet" (על צד הכינוי) it is also in things. And though one thing cannot be predicated essentially of another unless it is part of the essence of that thing, still it is possible by way of "epithet" and "enunciation" ($\alpha\pi\acute{o}\text{-}\Phi\alpha\sigma\iota\varsigma$ = *enunciatio* = גזרה) that one thing should be predicated of another, though the predicate is not in the subject but outside of it; for example, when we say that a vessel is human, it is not because of the humanity that is in it, but by reason of the humanity that is outside of it; for humanity is not in the vessel ... In the same way, since the thing outside of the mind exists as a particular, it cannot in so far be called a universal. It can be so called only from the point of view of the examination of the intellect, which examines it in an abstract and general way (במציאות) (מיפשט וכולל). It is, therefore, called universal by an *external* "enunciation"; since it is the mind that brings universality into things, as appears from the words of Averroes. According to the advocates of this belief, therefore, the universals exist out of the mind only *materialiter*, for that concept (sc. the universal) is derived from the things themselves as

investigated by the mind abstractly (במצאות מופשט), but they exist in the mind actually and *formaliter*, because the mind "informs" them and gives them existence. According to this, one and the same man may be a species or a genus according to the degree of abstraction. For if you look upon man as abstracted from individuality alone he is a species. If you regard him in a still more general manner, as abstracted also from the "differences" of the species, he is a genus. Therefore every thing *extra animam* is a particular, and at the same time a universal potentially; while in virtue of the mind it is a universal actually . . ."

This view may be stated briefly as follows: Our senses give us particulars; our intellect universals. At the same time unless the objects of sense had *per se something* that makes them susceptible to intellection as universals, there would be no relation between intellect and sense. This "something", then, is the universal existing *materialiter extra animam*, to which when there is joined the activity of the mind, there arises the universal *formaliter* or *in actu*. Since the activity of the mind is absolutely necessary to the formal existence of the universal, and this activity exerting itself on the object of sense is susceptible of degrees, the same thing may be more or less general, a universal of a higher or lower rank, according to the degree of abstraction exercised by the mind.

This view, though not that of Messer Leon, he esteems more highly than the preceding ones, as it is near the truth, and is held by great and wise men (זאת הסברה היא מאנשים וגדולים חכמים ומחוכמים ומתקרבת אל האמת), though in the interest of brevity he does not give the arguments in favor of this doctrine.

Finally he adds a fifth view, which he calls his own, also a compromise between extreme nominalism and extreme

realism, with a greater inclination to the latter than number four. It is based on the fact that, mind or no mind, there is something that Socrates and Plato have in common, and this is the universal existing *extra animam*, and actually too. Socrates taken by himself is a particular, because of the particular elements that make up Socrates, which particular elements individualize the universal nature in him; but humanity and animality are universals, because they are common to a number of individuals, and that whether the mind acts or not. The only complement the universal receives from the intellect is that of being predicated of a number of individuals; for in predicating the universal the mind abstracts entirely from the individualizing principles which always hover about it *extra animam*.

(fol. 256 ff.) ואחר התיישב כל מה שיסברו הכתות הנזכרות בענין הכללי אחזה דעי גם אני ואבאר הנרצה בכללי לפי דעתי בזה המקום ... ונאמר שהכללי הוא חוץ לשכל בלתי נפרד מפרטיו במציאות והוא בכל אחד מהפרטים ההם עם היותו נכֹּשֶׁבֶל אִמָּנָם הצד אשר יאות בו לאמר שהוא חוץ לשכל היות כל כללי מטבעו שימצא ברבים ואף עם הנחת העדר פעולת השכל בזה הענין כי אין ספק שִׁאֲעַפְּ שטבע האנושות והחיות נמצאו בראובן ונתיחדו מהתחלות הפרטיות באיש אחד מִמֵּן טבע האנושות מדרכו שימצא ברבים וטבע החיות מדרכו שימצא ביותר ממנו וכן טבע הגשמות והעצמות וקרה אליהם היחוד בפרטי ההוא מצד מה שהם כללים והנה ראובן יהיה פרטי מהתחלותיו הפרטיות והחיות והאנושות הנמצאים בו לא יכללו יותר ממנו כי באו אל הפרטות באמצעות ההתחלות ההם אלא שהם מצד עצמם ומטבעם שימצאו ביותר מאחד והנה טבע המינים והסוגים וזולתם הוא חוץ לשכל לא שיהיה דבר נפרד כמו שחשב אפלטון גם לא שיהיה לו דין הכללות מצד השכל לבד כמו שאומרת הכת הרביעית אלא שהוא בפרטים ובכל אחד מהם מצד שהמהות ואם הם נגבלות מטבע הפרטי בנישא אחד מִמֵּן ימצא להם מצד עצמם השתוף בטבע להמצא ברבים ויקראו כללים מזה הצד ואם השכל לא יפעל כלל בזה אלא שמצד הנשיאות הוא עֹכֶפֶ ציור שכלי אשר לוקח אותו מופשט מן ההתחלות ההם הפרטיות במדרגה שישואהו בהקדמות על מה שינשא לפי החפשה לֹא מיניית תהיה או סוגיית וזה לא יתכן עשיתו כי אם בשכל והנה באמצעות השכל הדבר אשר מדרכו שימצא

ברבים שב להיות נשא על רבים אשר זה היה נמנע בערכו בזולת שכל
 וכאשר היה הענין כן השכל משלים מציאות הכללי ... והתחייב מזה המאמר
 שהוא חוץ לשכל מצד טבע השתוף והחמצא ברבים אשר בזה לא יפעל
 השכל כלל אמנם הוא בשכל מצד הנשיאות וההפשטה ובוה האופן הוא ציור
 נפרד מן הפרטים ...

"Now, having given the opinions of the various sects mentioned, I may be allowed to present my own view also in this matter ... I would say, then, that the universal is outside of the mind, and not separate in its existence from the individuals; and it is in every one of the individuals, while being at the same time also in the mind. It has an existence outside of the mind, for it is the nature of every universal to inhere in many, even if we suppose the absence of the activity of the mind in this matter. For there is no doubt that though humanity and animality are found in Socrates, and are individualized by the particular elements in that person, still it is the characteristic of "humanity" to exist in many, and of "animality" to exist in still more; and similarly with corporeality and substance. And they are individualized in that particular, in virtue of their being universals. Now Socrates is a particular, because of his particular elements, and the "animality" and "humanity" found in him are not more universal than he is, for they become particularized by those particular elements in him; but *per se* and by their nature, they exist in more than one. Hence species, genera, and the rest are outside of the mind, not as existences apart, as Plato thought; nor yet as receiving their universality from the mind alone, as the fourth class maintain, but as existing in the particulars and in every one of them. For these essences (sc. genus, species, etc.), though they are limited by the nature of the particular in a subject, still *per se* they have by nature a common character, by virtue of which they exist in more than one;

and from this point of view they are called universals, though the mind were supposed not to act at all. In so far, however, as they are *predicated* of things, they are mental concepts abstracted from the particular elements united with them, and predicated in a judgment of whatever subject it may be by abstraction, specific or generic. This can be done only by the mind; and it is through the mind that that whose characteristic it is to *exist* in more than one is *predicated* of more than one. This could not occur without the activity of the mind. Consequently, the mind completes the being of the universal . . . It follows, then, that the universal is outside of the mind, by virtue of its common nature and existence in more than one. In this the intellect does nothing. It is, however, in the mind, as *predicated* and abstracted. In this way it is a concept apart from the particulars."

This semi-realistic view is attributed by Hauréau (*op. cit.* II, pt. 2, p. 408f.) to some Franciscans opposed by Occam. Hauréau states their view as follows: "L'universel est une chose vraie, réelle hors de l'âme, distincte de l'individu auquel elle est inhérente, mais numériquement multipliée, diversifiée, suivant le nombre des individus. Ainsi disent-ils, l'humanité, qui est en Socrate se distingue réellement de l'humanité qui est en Platon; mais la cause de cette distinction n'est pas la nature même de l'humanité, qui, par elle-même, *per se*, est universelle et commune; cette cause est la différence individuelle qui vient saisir, resserrer, comprimer, *contrahere*, en Socrate, le tout qu'elle lui confère séparément, distinctement."

His own view, too, his desire for brevity does not allow him to prove by citing arguments, and he devotes the last part of the discussion to answering the arguments of the two extremes, nominalists and realists. It will be seen that the realism expressed here does not tally with the concep-

tualism expressed in the earlier part of the work, in reference to the subject of logic. As we saw above, Messer Leon follows Avicenna in declaring the "conceptus primus", or "ens rationis" the subject of logic; as this includes according to him the subject-matter of all the books of the Organon, except that dealing with the categories which, though they belong to "conceptus primus", are treated in that book only because of the relation they bear to the "conceptus secundus". Thus he calls the universals, genus, species, etc. "conceptus"; whereas here he defends the doctrine that they exist *extra animam*. Walter Burleigh (v. Prantl, XIX, p. 298 ff.), who also combines a logical conceptualism with a metaphysical realism, attempts to bridge over the gulf by modifying Avicenna's phrase, "intentiones intellectae secundo", as the subject of logic, into "*res secundae intentionis*", with the emphasis on *res*. Messer Leon apparently does not find it necessary to make his view consistent.

§ 10. The details of his commentary offer nothing remarkable. They show an intimate knowledge of the works of Aristotle, a wide reading in Latin and Hebrew (the only languages he knew) on the subject¹, and a free use of the scholastic material, which he was probably among the first to make accessible to those who read only Hebrew.

Among the more important points in his commentary, confining ourselves to the Categories, we may briefly mention the following.

To explain the relevancy of the first chapter of the Categories, in which Aristotle prefaces his treatment by a definition of the terms "homonyms", "synonyms", and "paronyms", it is said that these three terms correspond to the three-fold relation in which the categories may be taken.

¹ But see below p. 73 f., 80 f.

(1) Their relation to the most general term, "existent" (נמצא = *ens* = τὸ ὄν). This is homonymous.

(2) The relation of each category, as a highest genus, to the genera and species under it. This corresponds to synonyms.

(3) The relation of one category to another. This is the relation of an accident to its subject; and a predication of this nature makes use of a paronymous adjective; thus, in the phrase "wise man", "wise" is paronymous from "wisdom", and represents the relation of quality to substance (236).¹

This peculiar interpretation of the purpose of the first chapter leads him to give a logical, instead of a purely philological, meaning to the term "paronym", and causes him further to confine its use to predication *per accidens*, whereas the predication of the difference, as for ex., *rational*, he does not regard as paronymous, even though rational is derived from rationality (*ib. b* and 237, cf. Topics, 109b 3—12, and the author's article on The Categories of Aristotle, Philosophical Review, XIII, p. 521).

Following the tradition, which goes back to the Greek commentators, he completes the list of these terms by adding מהחלפים = *diversivoca* (Boetius) = ἐτερόνυμα (Porphyry, etc.), i. e., where there is no community either of name or essence; נרדפים = *multivoca* = πολύνυμα, i. e. more than one name for the same thing; מושאלים = *secundum translationem* = κατὰ μεταφοράν, i. e. metaphorical application of terms; and נסיפים = *analogia* = κατ' ἀναλογία, i. e. where a term properly denoting one thing is applied to another, because the position of the latter in its sphere is analogous to that of the former in its sphere; as when we call the base of a mountain "foot", because the base of the mountain is to

¹ Cf. below p. 83f.

the mountain, as the foot of an animal is to the animal (236*b* and 237*c*).¹

Like Boetius, Messer Leon includes under *λόγος*, in the definition of homonyms, etc., also description (רשם), and concept (ציור), although the Latin reads "substantiae ratio", and the Hebrew of Averroes, גדר כל אחר מהם המודיע עצמו (Heb. Av. 8*b*).²

In the second chapter of the Categories, Aristotle makes a four-fold classification of existing things (τὰ ὄντα).

(1) Things predicated of a subject, but not inherent in a subject; by which Aristotle means *general substance*.

(2) Things inherent in a subject, but not predicated of a subject. This corresponds to *particular accident*.

(3) Things predicated of a subject and inherent in a subject — *general accident*.

(4) Neither predicated of a subject, nor inherent in a subject — *particular substance*.

In this division Aristotle leaves, according to Messer Leon, no room for the difference, as the latter satisfies none of the four conditions. It does not, however, follow, he says, that the difference is neither substance nor accident. It is substance, but it comes under the categories not "straight" but "sideways", כי הוא אינו בקו המאמר ביושר כי אם מן הצדדים (241 and 263).³

¹ Cf. below pp. 84—5.

² The references to the Hebrew of Averroes are to Jacob Anatoli's Hebrew translation of Averroes' middle commentary to the Organon, Ms. Leipzig State Library, designated by Steinsch. *op. c.* p. 59, Lp. 41 A. There is a leaf missing between 23*b* and 24. The paging in lead-pencil must have been put there after the leaf had disappeared.

³ Intelligendum est hic quod differentia de genere substantiae est secunda substantia, sed non est directe in linea praedicamentali substantiae, sed indirecte et a latere ... Burleigh, *op. c.*, f. 25*b*.

Two conditions are requisite for a thing to be in a category — first, that it be *something* (שׁיחיה דבר מה); second, that it have a particular manner of being (שׁיחיה לו אופן מציאות מיוחד). The “manner of being” necessary for an object under the category of substance is (a) self-existence (שׁיחיה עומד בפני עצמו); (b) that it be the subject of accidents (שׁיחיה נושא למקרים); which latter is not found anywhere except in substance, and most strictly, only in primary substance (244 b).¹

Quantity is discussed by Aristotle immediately after substance, according to Messer Leon, because it is the accident nearest to substance; so much so that many regarded it as substance by itself (269).

The treatment of quantity in the Categories is from a point of view different from that in the Metaphysics (Δ ch. 13, 1020a 6f.). There it is divided into species according to its essence; here, in relation to measurement (269 b).

A peculiarity of quantity is that it is measured by one of its parts. In discrete quantity, the part selected is a natural unit. In continuous quantity, the unit is conventional. In discrete quantity, it is the smallest possible; in continuous quantity, there is no smallest, for it is infinitely divisible (270 b and 286 b).²

Apropos of the discussion of the different kinds of quantity, and their different treatment by Aristotle here and in the Metaphysics, where *τόπος* and *λόγος* are omitted, Messer Leon quotes קצת המפרשים to the effect that Aristotle, unless he is specially treating of a given subject, does not mind

¹ See below pp. 85—6.

² Intelligendum quod in quantitate continua absolute considerata est dare maximam quantitatem, ut quantitas caeli, sed non est dare minimam quantitatem continuam, cum continuum sit divisibile in infinitum. Sed in quantitate discreta est e contra; quia in illa est reperire minimum numerum ut binarium, sed non est reperire maximum; quia numerus crescit in infinitum ad divisionem continui. Burleigh, *op. c.*, f. 32.

sometimes making statements which are inexact and which do not represent his real opinion, but that prevalent at the time, leaving a fuller and more exact discussion of the subject to its proper place (277).¹ (cf. Waitz, *Organon* I, 284, 316; 293).

From the point of view from which quantity is treated in the *Metaphysics*, time belongs to the categories *per accidens*; for essentially (לפי המציאות), time follows from motion, and motion gets its division from magnitude; so that division, which is one of the properties of quantity, flows from magnitude to motion, and from motion to time; whereas in the categories, the investigation is from the point of view of measurement (שיעור), and hence, time is a quantity *ααθ'* ααθδ (277b).

By "place" in the *Categories* is meant the enclosing surface (שטח מקרה). Others think it is an extension (מרחק) which enters the object (נכנס במקומם) (*ibid.*).

The relative is of two kinds:

(1) The existentially relative (הצטרפות עניני), and (2) the logically relative (הצטרפות דברי). The logically relative may in reality belong to a different category from that of relation. For example, "knowledge" is a logical correlative of "thing known", but in reality it belongs to the category of quality (287). The existential relatives are in the category of relation, like father and son, master and slave; and of these, neither correlative can be understood without the other (287b).²

There is a difference of opinion concerning relation. Some

¹ Philosophus loquitur hic (sc. in *Categoriis*) secundum opinionem aliorum . . . Burleigh, *opf. c.*, f. 31.

² cf. below pp. 86—8.

think that relation is a thing not different from the basis and subject (היסוד והנושא) of the relation; others think that it is different; while a third class believe that it is not a thing at all, but only a sign of things, i. e. a word or term (סימן הענינים דל חיבה וגבול) (293 *b*). His own view, in accordance with the realistic standpoint maintained above in the discussion of the general question, is that relation is something different from the subject in which it inheres (298 *b*).

Messer Leon amends Aristotle's criterion of "natural simultaneity" (*ἄμω φύσει*), viz. the impossibility of one existing without the other, by saying that this applies only to those cases where the two are not related to each other as cause and effect. If there is a causal relation between them, the condition above mentioned applies, and yet they are not simultaneous, the cause preceding by nature the effect (302).¹

Fol. 318 *b* he promises to treat of the last six categories in a special essay, and so omits them in his commentary.

A thing may exist (1) in the mind (בשכל). (2) Out of the mind (חוץ לשכל). (3) Neither in nor out of the mind, but apprehended by the mind (לא בשכל ולא חוץ לשכל אבל יושג מהשכל). This is called apprehensible existence (מציאות השגיי)²; for ex., the negative or privative, privation of sight (שלילת הראיית). (4) Neither in the mind, nor out of the mind, nor apprehended by the mind (לא בשכל ולא חוץ לשכל גם לא יושג מהשכל). This is the non-existent (אינו נמצא) (324).

¹ Sciendum quod illa sunt simul natura quae posita se ponunt, et perempta se perimunt, sic quod neutrum eorum est causa alterius; quia si unum illorum est causa alterius, tunc non sunt simul natura quamvis posita se ponunt et perempta se perimunt. Burleigh, *op. c.*, f. 36.

² Quae neque existunt in anima neque extra animam et intelliguntur ab anima, dicuntur habere esse obiectivum in anima et nullum aliud esse. Burleigh, *op. c.*, fol. 44.

§ 11. TEXTUAL CRITICISM.

Messer Leon's chief merit historically is that he contributed by his work to a better understanding of Aristotle among his coreligionists, whose main authority for the Aristotelian philosophy besides Averroes, who furnished the only text they had, was Gersonides, famous as a philosopher and commentator. This contribution was due to his using as the basis of his commentary, in addition to the Hebrew text of Averroes, also the Latin text of Aristotle, and correcting the one by the other.

Averroes did not know Greek, and his commentaries are based on Arabic translations, made either directly from the Greek, or in their turn based on Syriac translations from the Greek. As the spirit of the Aryan Greek is widely different from the Semitic Syriac or Arabic, it is to be expected that in more than one instance Averroes should misunderstand the meaning of Aristotle, and misrepresent him. This would be especially true of a book like the *Categories*, which is largely linguistic in character, and where many a passage can scarcely be intelligibly translated into a language so widely differing from the Greek as the Arabic. The language into which the *Categories* can best bear being translated is the Latin, which, besides being so near philologically to the Greek, had for centuries been used in expressing nearly related thought. Thus the Latin translations of the *Categories* in the fifteenth century were decidedly superior to the paraphrases of Averroes. Messer Leon, therefore, though far inferior to Gersonides in power and originality, had the advantage of a better text, and availed himself of it. I shall now show in detail the use Messer Leon made of the Latin text, incidentally attempting to account for the misrepresen-

tations of Averroes, and pointing out the helplessness of Gersonides, as a proof that at least in the Categories he used no Latin text. With the exception of one passage in the Isagoge, which concerns Messer Leon's interpretation of Averroes, I shall confine myself to the Categories.

Of the three significations of the word *γένος* given by Porphyry in the Isagoge (I f.), the second reads as follows: λέγεται δὲ καὶ ἄλλως πάλιν γένος ἢ ἐκάστου τῆς γενέσεως ἀρχή, εἴτε ἀπὸ τοῦ τεκόντος εἴτε ἀπὸ τοῦ τόπου ἐν ᾧ τις γέγονεν· οὕτως γὰρ Ὀρέστην μὲν ἀπὸ Ταντάλου Φαμὲν ἔχειν τὸ γένος, Ὑλλον δὲ ἀφ' Ἡρακλέους, καὶ πάλιν Πίνδαρον μὲν Θηβαῖον εἶναι τὸ γένος, Πλάτωνα δὲ Ἀθηναῖον, καὶ γὰρ ἢ πατρὶς ἀρχὴ τίς ἐστι τῆς ἐκάστου γενέσεως, ὥσπερ καὶ ὁ πατήρ.

This is the abstract use of the term in the sense of "birth", "origin". The Hebrew translation of Averroes' middle commentary (Lp 1b) renders this as follows: והשני על ההללה והחם היה אב או מקום וזה לא יעשה כמו שיאמר ההדם והם הבשר והחם והאנדלוס והאנדלוס והם, which Jacob Mantinus (Latin ed. of Arist. w. comm. of Aver. Venice 1574, 3E) renders as follows: "Secundo dicitur (sc. genus) de origine alicuius genealogiae, sive illa fuit pater aliquis, aut locus. Is tamen modus non est in lingua nostra in usu, ut cum quis dixerit genus Bassar, et Vandaliam genus Vandalorum."

The original Arabic of Averroes is not accessible to me, there being only two mss. of it in existence, in Florence and in Leyden. But the Hebrew translation quoted above makes the meaning of Averroes clear. We may translate it as follows: "The second meaning of the word genus (יחם) has reference to the origin in respect to descent, whether this origin be a person, i. e. ancestor, or a place. This use is not found in Arabic, i. e. we cannot call Adam the 'genus' of mankind, or Andalusia the 'genus' of the Andalusians."

The reference is to the Arabic phrase *أبو البشر* = Adam,

lit. "father of mankind" (cf. Steinsch. *op. c.* 75, *Ann.* 190).

Now Averroes understands this meaning of *γένος* in the concrete sense as equivalent to "father", and thus he says that it cannot be so used in Arabic; for whereas the Arabic calls Adam the "father" of mankind, it cannot call him the "genus" of mankind. The Hebrew translator, Jacob Anatoli, whether because he did not understand the text, or for some other reason, does not put the Hebrew equivalent of the Arabic *بشر* (בשר) meaning mankind, which would be בני אדם, but transcribes the word בשר, which in Hebrew means "flesh", and thus obscures the meaning of the passage. Jacob Mantinus, the translator of Averroes into Latin, probably from the Hebrew of Anatoli, makes confusion worse confounded by leaving out the word "Adam", and writing in Latin "genus Bassar", thus converting Bassar into a proper name. Messer Leon, who did not know Arabic, is naturally puzzled as to the meaning of the Hebrew text האדם יחס הבשר, but he cleverly hits at the truth (207), thinking that בשר is used after יחס instead of אדם, to avoid the repetition of the word אדם which precedes יחס. And he cites also a Latin translation of Averroes, as confirming that interpretation. That cannot be the translation of Jacob Mantinus from which I quoted above, for, apart from the fact that it does anything but confirm Messer Leon's interpretation, the latter could not have used it, as it was not composed until after 1454, the approximate date of Messer Leon's commentary (See Steinsch. *op. cit.* p. 976 f.).

Messer Leon, then, mentions another reading האדם יחס הכשר "Aram is the genus of Kesed", which he rejects as an example of genus in the sense of ancestor, since Aram was a descendant of Kesed and not an ancestor (cf. Genesis XXII, 21—2). It may however, he says, be an example of genus as applied to place, and this reading may stand, as

Aram may designate Mesopotamia, ordinarily called ארם נהרים. Steinschneider (*op. cit.* p. 75) is wrong in attributing to Messer Leon a reading הכשר, which he traces to Isaac Kimchi, who derives it from אתבשר.

Heb. Aver. (Lp 9), in paraphrasing Categ. 1 b 20—4, reads: ואם הסוגים שקצתם נכנס תחת קצת לא ימנע שיחשב שכבר יהיו מבדיליהם ממין אחר המשל בזה כי החי כבר יחלק במימי וארצי ויחלק בם הנוון והחי מסודר תחת הנוון. "As for genera which are subordinate one to another, there is nothing to prevent their differences from being of the same species. For ex., 'animal' is divided into 'aquatic' and 'terrestrial', and the same differences divide also 'nutrible being'; and 'animal' is subordinated to 'nutrible being'."

This is also the reading of Messer Leon (242), who explains it properly to mean that the "divisive" differences (= διαφορὰ διαιρετικὰ of Porphyry, *In Categ.* 84—5) of the lower genus will also divide the upper, though, as he adds, not exhaustively. This would seem to prove that the text of the Categories Averroes used had the emended reading of Boethius (*ap. Simplic. Basileae* 1551, f. 14 b): ὅσαι τοῦ ὑποκειμένου διαφορὰ, τασαῦται καὶ τοῦ κατηγορουμένου ἔσονται¹.

The Latin translation of Averroes by Jacob Mantinus (25 b G) reads as follows: "Genera vero, quae inter se invicem sunt subordinata, nihil prohibet quin credatur quod eorum differentiae sint eiusdem speciei, ut exempli gratia, animal dividitur in aquaticum, et aereum, et terrenum, per quod dividitur et nutribile; animal autem sub nutribili ordinatur. Et huius rei causa est quia differentiae, quibus dividitur

¹ This would at least raise the presumption that Averroes did not use the Arabic translation of Isaac ben Honein, for that (ed. Zenker) has the ordinary reading. Cf. also the author's article on the Categories of Aristotle, *Philosophical Review*, XIII, pp. 522—3.

genus superius, praedicantur omnino de generibus quae sunt sub genere superiori: quia illud praedicatur de omnibus illis generibus, quae sub ipso existunt. Cum ergo illae differentiae quibus dividitur genus superius non sunt constitutivae generum quae sunt sub illo, tunc dividuntur per eas illa genera, eo pacto quo dividitur genus superius, quia si praedicentur et non sint constitutivae, erunt profecto divisivae."

The Italicized portion of the above is not found in the Hebrew of Jacob Anatoli (Lp), nor was it found in the Hebrew text of Averroes used by Messer Leon as the basis of his commentary. This external evidence goes to show that it is an interpolation. But there are also internal reasons for condemning it. It does not all fit in with the preceding. Whereas the preceding cites an example to prove that "divisive" differences of the lower genus also divide the upper, the sequel, in explaining the reason for this, proves that a divisive difference of the upper must, unless it is "constitutive" of the lower, also divide the lower. The interpolation is no doubt due to one who, not knowing of a different reading, did his best to harmonize Averroes with the accepted reading. Gersonides, too, seems to have had no such addition in his text of Averroes or, one feels sure, he would have had something to say about it. Messer Leon recognizes that the Averroes of his Hebrew text does not fit in with the העתקה הניצירה, i. e. the Latin text of Aristotle; but says nothing of a different reading, though, if he read Boetius and Simplicius, whom he often quotes¹, he must have been aware of the suggested emendation. It seems also that the Latin translation of Averroes used by Messer Leon, which was not that of Jacob Mantinus, as we saw above, had no such addition, or Messer Leon would have mentioned it, for he makes use of it now and then, though rarely.

¹ See below p. 73 f.

Averroes misunderstands Categ. 3b 10—21. He regards the passage as an argument to show the difference between primary and secondary substance; whereas it quite as truly aims to bring them together as against the other categories, for ex. that of quality. Averroes' error especially concerns the bearing of lines 18—21, which he understands as a further argument to distinguish secondary from primary *οὐσία*, while as a matter of fact the lines in question distinguish secondary *οὐσία* from the category of quality. He therefore renders the passage (Lp 11) as follows:

וכבר יחשב שכל עצם הוא אמנם יורה על העצם הרמוז אליו והוא האיש אם העצמים הראשונים הדבר בהם מבוואר שהם אמנם יורו על האישים הרמוז אליהם כי מה שיוורה משמותם עליהם הוא דבר אחד במספר ואם העצמים השניים כבר ידועו השמות המורים עליהם להדמות בשמות האישים או להעשותם במקומות שמות האישים שהם יורו על הרמוז אליו ואין הענין כן אבל אמנם יורו על איזה רמוז שיוצא מן אחר שהנשיא לזה השם אינו אחד בעצמו כשם המורה בצורתו על העצם הראשון והוא שזויד ועמר אמנם יורו בו על הרמוז אליו בלבד ואמנם האדם והחי ובכלל המין והסוג יורו בו על רבים והם עם זה הפרשת אלו הרבים מולתם לא הפרש שיהיה סימן לבד במדרגת מה שיפריש חלכן הדבר המתואר בו אבל הפרש בעצם הדבר.

This is translated into Latin by Jacob Mantinus (30b, I, *Particula undecima*) as follows: "Videtur autem quod omnis substantia significet substantiam singularem individuum. De primis quidem substantiis nemo dubitare potest hoc esse verum quod significant individua ipsa; eorum enim nomina unicum rem numero significant. De secundis vero substantiis videtur quod nomina, quae eas significant, simulantur nominibus significantibus illas: quia simulantur nominibus individuorum, vel quia sunt in usu pro nominibus individuorum, quae quidem significant individuum. Sed res non ita se habet: sed significant *quodcunque individuum contigerit*, cum subiectum huius nominis non sit unum in se, quemadmodum est

nomen quod significat per formam suam primam substantiam, nam Socratis et Platonis nomen significat individuum tantum, sed homo et animal, et denique species et genus multa significant: licet distinguantur huiusmodi multa ab aliis, non distinctione, quae sit tantum signum, ut distinguit album id quod denominatur per ipsum, sed distinctione per essentiam rei."

It will be seen that while he has the general meaning of the passage, he, on the one hand, misses the precise signification of *τὸδε τι* and *ποιόν τι* and, as a consequence, on the other hand, misunderstands the bearing of lines 18—21 as pointed out above.

The origin of the error is to be found in his Arabic text of Aristotle, which, if it was that of Isaac ben Honein (cf., however, above, p. 46, note), renders *ποιόν τι σημαίνει* by *انها تدل على اتي شيء* (ed. Zenker, 11, line 1). Now the phrase *انها تدل على اتي شيء*, which the translator, assuming that he understood the Aristotelian text, meant to be taken as an indirect interrogative, Averroes took as an indefinite, in the sense of "anything whatsoever". At least so the Hebrew translator understood Averroes, and rendered him by the words spaced in the above quotation, *אבל אמנם יורו על איזה רמז שיורמן*, and the Latin Averroes follows the Hebrew, rendering it as italicized above, "sed significant quodcunque individuum contigerit". The Arabic term for the category of quality (*ποιόν*) is *انكيف*, and hence *انها تدل على اتي شيء* did not suggest to Averroes what *ποιόν τι* does to us. Moreover the Arabic reading (Zenker, *ib.* line 6) *انها اما يدلان على جوهر ثاني ما*, i. e. *δευτέρων γὰρ μόνον τινὰ ἐστὶν σημαίνει*, in place of the true reading (Categ. *ib.* 20—21), *ποιὸν γὰρ τινὰ ἐστὶν σημαίνει*, further tended to obscure the bearing of the passage to

Averroes' mind, and led him to think that the object of Aristotle was to emphasize the difference between secondary and primary *ὁὐσία*.

Now if Gersonides had used a Latin text, he could not have failed to note the error of Averroes, or at least the variation. His silence is a sure proof that he used nothing besides the Hebrew Averroes. Messer Leon, as might have been expected, notes the difference between the two texts, and prefers the Latin, as giving a better connection to the thought.

(264 f.) וראוי שתדע שההעתיקה הנצחית במקום שנאמר בכאן אמנם יורו על איזה רמזי הודמן אומרת אמנם יורו איכות מה אבל לא במוחלט יורו על איכות מה כמו הלובן למה שהלובן אינו מורה כי אם על האיכות שהוא מקרה והסוג והמין מגבילים איכות העצם וכי' והרצון בזה שאלה יורו על טבע כולל ועל מהות מה שהוא מגביל הדבר אשר לו המהות ההוא וזה האיכות יקרא איכות מהותי כמו שנאמר בהבדל שהוא נשא מדרך איך הוא עצמו ולפי זאת ההעתיקה יקשר יותר מה שאמר מענין הלובן.

The spaced in the above is a literal rendering of Boetius' translation (p. 27^b K), "*sed magis quale aliquid significant. . . . Non autem simpliciter quale quid significat, quemadmodum album (nihil enim aliud significat album, quam qualitatem) at species et genus circa substantiam qualitatem determinant*". And the above quotation from Messer Leon may be translated as follows:

"You must know that the Latin translation instead of reading as here, '*sed significant quodcunque individuum contigerit*', reads '*sed magis quale aliquid significant. Non autem simpliciter quale quid significat, quemadmodum album, (nihil enim aliud significat album quam qualitatem), at species et genus circa substantiam qualitatem determinant*', etc., and the meaning is that these (sc. genus and species) designate a universal *φύσις*, and an essence which limits the object

containing that essence. This quality is called essential quality, as has been said in the case of the difference, that it is predicated 'in eo quod quale quid est essentialiter'. And according to this translation there is more relevancy in the statement concerning whiteness."

Another interesting passage, involving a comparison of the Latin text and a discussion as to the meaning of *τόπος*, is found fol. 273. The Aristotelian text in question is found Categ. 5a 8—13: *πάλιν ὁ τόπος τῶν συνεχῶν ἐστὶ. τόπον γάρ τινα τὰ τοῦ σώματος μόρια κατέχει, ἃ πρὸς τινὰ κοινὸν ὅρον συνάπτει· οὐκοῦν καὶ τὰ τοῦ τόπου μόρια, ἃ κατέχει ἕκαστον τῶν τοῦ σώματος μορίων, πρὸς τὸν αὐτὸν ὅρον συνάπτει πρὸς ὃν καὶ τὰ τοῦ σώματος μόρια.*

Hebr. Aver. (Lp 12, lls. 22f.) renders it as follows: **ואם המקום לפי שחלקי הגשם ימלאוהו והם ידבקו (חלקי הקו) בגבול משותף** **אם כן מחייב שחלקי המקום ידבקו בגבול משותף גם כן**; or as the Latin Aver. (34 F) has it, "Locus quoque, cum particulae corporis in eo contineantur, et in terminum communem copulentur, oportet ergo ut particulae loci copulentur ad terminum communem etiam." This implies only that the parts of *τόπος* have a common boundary, as do the parts of *σῶμα*, without necessarily intimating that the boundaries are the same, and that all the boundaries of *σῶμα* are also the boundaries of *τόπος*. This reading of Averroes, Messer Leon remarks, is different from that of the Latin translation, which he renders: **שחלקי המקום ידבקו בגבול משותף באשר ידבקו** **החלקי הגשם**, "that the parts of place are held together by the common boundary which holds together the parts of

¹ The words in parenthesis are most probably an error of the copyist. They do not make sense and were not found in M. L.'s text, nor are they found in the Latin Averroes of Jacob Mantinus, Venice 1574.

body", and which fairly represents the Latin of Boetius in the Venice edition of Aristotle, 1574, "ergo et loci partes ... ad eundem communem terminum copulantur ad quem et corporis partes".

According to this reading, which is that of our Greek text, the parts of place may have a surface as their common limit, like the parts of body. To this Messer Leon objects, as being opposed to Aristotle's statement in the fourth book of the Physics (212a 28?) that *τόπος* has no divisibility in depth (המקום הוא בלתי מתחלק מצד העומק). Since, therefore, it can have only two dimensions as the surrounding limit of a solid, its parts can have as a common boundary only a *line*, like the common boundary of the parts of a surface; which is opposed to the Latin reading. The only way, Messer Leon suggests, to reconcile the Latin text is by adopting Averroes' statement in his 'great' commentary (on the Categories? Cf. below pp. 78—9), that Aristotle treats here of *τόπος* not in its true character as a bi-dimensional surrounding limit of bodies, but, according to beliefs current in his day, as filling up the interstices of bodies, and hence as a tri-dimensional being co-extensive with bodies, and thus having the same common limits of its parts as bodies.

(Fol. 273) ודע שההעתקה הנצוית אומרת בכאן שחלקי המקום ידבקו בגבול משותף באשר ידבקו חלקי הגשם וזה יראה שלא יצדק, שהגשם ידבקו חלקיו בשטח אמנם המקום הוא בלתי מתחלק מצד העומק כפי מה שהתבאר ברביעי מהשמע טבעי והנה אֵל ידבקו חלקיו בגבול משותף באופן הענין כן בשטח דֵּל בקו המדומה במקוֹף ואומר בכאן בֵּר בבואורו הארוך שהפילוסוף אינו מדבר בכאן במקום לפי המחקר האמתי כי אם לפי הדעת שהתפרסם בימים ההם שהיה הגוף מלא מנקבים דקים והמרחקים שהיו המקום לפי דעתם היו ממלאים הנקבים ההם והנה היו יחד חלקי המקום והמקומים בכל מקום ולזה היה מן המחויב שהגבול המשותף שהוא השטח באשר ידבקו חלקי הגשם באותו הגבול בעצמו ידבקו חלקי המקום אמנם חלקי המקום לפי האמת הם ידבקו בקו אשר במקוֹף כמו שביארנו, ולפי זה המאמר מֵבֵר

בביאור הנזכר יראה שדעתו בכאן ג"כ יהיה שהנרצה במקום הנה מארסמו הוא לפי סברת הקדמונים מאמיני הריקות ויתחייב היות למקום גבול משותף למה שאנחנו רואים שחלקי הגשם יש להם גבול משותף אחר שבכל מקום שהם חלקי הגשם יהיו המרחקים ההם לפי דעתם, ויהיה גבול משותף אחד לשניהם ר"ל השטח שהוא פנימי לגשם אלא שאם לא הורינו זה מ"מ ביארנו שהמקום יש לו גבול משותף ידבקו בו חלקיו מצד שהגשם המוקף ממנו יש לו גבול משותף. וזה שאחר שהגשם הוא מתדבק א"כ המקוף אותו מכל צד שהוא המקום הוא מתדבק. ג"כ והנה יהיה שטח מה ויתחייב מזה שיהיה לו גבול משותף ידבקו בו חלקיו כאשר הענין במקומם לא שיהיה זה הגבול השטח כאשר הענין במוקף אלא הקו שהוא במקיף כאשר התבאר.

"Know that the Latin translation reads here — 'that the parts of place join in the common boundary in which the parts of body join'. But this does not seem to be correct; for the parts of body can have a surface as a common boundary, whereas place is indivisible in depth, as is explained in the fourth book of the Physics. If so, its parts can have a common boundary in the same way as a surface has, namely an imaginary line in the surrounding body. Averroes says here in his 'great' commentary, that the philosopher is not discussing place here in its true meaning, but according to the opinion current in those days, that bodies are full of little holes, and the interstices which, according to their opinion, constitute place, fill those holes. And hence the parts of place, and the parts of bodies occupying place are everywhere together. From this would necessarily follow, that the common boundary, namely the surface which joins the parts of body, should also join the parts of place. In reality, however, the parts of place join in a line on the surrounding limit, as we have explained. Now, according to the statement of Averroes in the commentary above mentioned, it appears that his opinion here also (sc. in his middle commentary) is, that Aristotle's treatment of place here is according to the view of those who believe in a

vacuum; and then it would follow that place has a common boundary; because we see that the parts of body have a common boundary, since wherever the parts of body are, those interstices are also, according to their opinion. Then they would both have one common boundary, namely the surface in the interior of the body. But though we do not share this opinion, still we made clear that place has a common boundary where its parts meet; because the body surrounded by it has a common boundary. For since body is continuous, that which surrounds it on all sides, viz. place, is also continuous; therefore it is some surface; and hence it follows that it has a common boundary where its parts join, as is the case in the body occupying place. This boundary, however, is not a surface, as in the body which is surrounded, but a line, which is in the surrounding body, as has been explained."

Fol. 280 and *b* is very interesting as showing in the first place, that Messer Leon has the commentaries of Gersonides in view, whether he mentions them or no. Secondly, that he likes to differ from him, if he can (cf. below pp. 93—108); and thirdly, that he represents an advance on Gersonides, in that he has a translation of Aristotle's text of the Categories, whereas Gersonides had only Averroes, and apparently never saw Boetius' Latin translation of the Categories; at least he never mentions it, and betrays no knowledge of it in his notes.

In Categ. 5*a* 15—37 Averroes finds three conditions necessary to constitute that species of quantity characterized by Aristotle in the words: *ἐκ θέσιν ἐχόντων πρὸς ἀλλήλα τῶν ἐν αὐτοῖς μορίων συνέστηκε*. These three conditions are, as Heb. Aver. has it (Lp 12*b*), (1) שיהיו חלקיו יחד, (2) שיהיה כל אחד מהם בצד מוגבל, (3) ודבוק בצד מוגבל, i. e. (1) "that its parts

be together", (2) "that every one of them be in a definite place", and (3) "touching a definite side". To this view the following phrases in Aristotle no doubt gave rise: (ib. 27) *ὑπομένει γὰρ οὐδὲν τῶν τοῦ χρόνου μορίων· ὃ δὲ μὴ ἔστι ὑπομένον πῶς ἂν τοῦτο θέσιν τινὰ ἔχῃ;* (ib. 18) *καὶ ἔχῃς ἂν διαλαβεῖν καὶ ἀποδοῦναι οὗ ἕκαστον κείται ἐν τῷ ἐπιπέδῳ, καὶ πρὸς ποῖον μόριον τῶν λοιπῶν συνάπτει.* Now the word יחד (together), in Hebrew, is ambiguous, and may refer either to time or place; and Gersonides, in order to make Averroes consistent, who denies all the three conditions to number (ואם המספר), finds it necessary to explain יחד in a spatial sense. Messer Leon, who had the Latin text of Aristotle before him, interprets the first condition to mean (fol. 279) *עמידת החלקים והנחתם*, i. e. in a temporal sense. The question then arises (280), how can Averroes deny all the three conditions to number? Besides, in the Latin text only the last two conditions are denied, and nothing is said of the first.

His first solution is that the Hebrew translation of Averroes is corrupt. He then makes a provisional attempt to save the text by assuming that יחד has a spatial sense; but if so, he objects, the second condition is identical with the first, unless we split hairs and say that the first requires merely position in some place in general, while the second requires a definite place. This he does not find satisfactory, as it does not seem to be the meaning of the text. The argument against the spatial interpretation of יחד is then further enforced by pointing out that the ground on which Averroes further on denies the first condition to time and speech is שאינם יחד למה שלא ישיג המתאחר מהם הקודם, which shows that he takes יחד in a temporal sense, and therefore the passage denying it to number must be corrupt. Finally, he makes another attempt to reconcile the difficulties by

explaining יתר to imply two conditions, one temporal, the other, requiring the existence of all parts in one subject. (This second is due to Albertus Magnus; cf. Franciscus Toletus, *Commentaria*, etc. *Coloniae Agrippinae*, 1575, p. 67, lines 49—51). Neither of the two applies to number, for the number three, say, must reside in three different subjects. The fact, however, still remains that the text of Aristotle does not exclude all the three conditions from number. Messer Leon, therefore, decides that the Hebrew text of Averroes can be saved by supposing that Averroes mistakenly understood Aristotle's first condition in the two-fold way indicated above.

The following discussion is a good instance of a confusion arising from translation into another language. It involves the following passages in the *Categories*, which, to facilitate comprehension, I shall quote first in the original, following each by its paraphrase in the Hebrew Averroes of Anatoli (Lp).

(1) *Categ. 2a 2*, Aristotle gives as an example of the category *κείσθαι* — *ἀνέκκειται, κάθεται*.

(1a) (Lp 9b 4) וההנחה כאמור מסב ויושב, i. e. "An example of *κείσθαι* is 'reclining' (ptc.) and 'sitting' (ptc.)."

(2) (*Categ. 6b 11—14*) ἔστι δὲ καὶ ἡ ἀνάκλισις καὶ ἡ στᾶσις καὶ ἡ καθέδρα θέσεις τινές, ἡ δὲ θέσις τῶν πρὸς τι· τὸ δὲ ἀνακείσθαι ἢ ἐστᾶναι ἢ καθῆσθαι, αὐτὰ μὲν οὐκ εἰσι θέσεις, παρω-
νύμως δὲ ἀπὸ τῶν εἰρημένων θέσεων λέγεται.

(2a) (Lp. 13b) וההסבה והעמידה והישיבה הם מן המצב והמצב מן הדברים המצטרף בצד מה ואמנם יסב ויעמוד וישב אינם מן המצב אבל מן הדברים שנגזר השם להם מן המצב הֲאִשֵּׁר במאמר המצב. "Reclining" (noun), 'standing' (n.), and 'sitting' (n.), belong to *θέσις*; and *θέσις*, in a way, comes under relation. But 'is reclining', 'is standing', and 'is sitting' do not belong to *θέσις*, but to those things

whose names are derived from *θέσις*, i. e., to those things which belong to category *κείσθαι*."

(3) (Categ. 11b 8—10) *εἴρηται δὲ καὶ ὑπὲρ τοῦ κείσθαι ἐν τοῖς πρός τι, ὅτι παρωνύμως ἀπὸ τῶν θέσεων λέγεται.*

(3a) (Lp 17b) וכבר נזכרו הדברים בעלי המצב בשער מאמר המצטרף ונאמר שהם הדברים ששמותם נגזרים ממאמר המצטרף כמו השוכב והמסב כי השכיבה וההסבה ממאמר המצטרף והשוכב והמסב מזה המאמר. "The things belonging to *κείσθαι* have already been mentioned in the section on the category of relation, and it was said that they are the things whose names are derived from the category of relation, for example, 'sitting' (ptc.), 'reclining' (ptc.). For 'lying' (n.) and 'reclining' (n.) belong to relation, while 'lying' (ptc.) and 'reclining' (ptc.) belong to this category (i. e. *κείσθαι*)."

In the Greek passages it is to be noticed that *κείσθαι* and *θέσις* are two different things. The former is the name of one of the ten categories, the latter is a species under the category of relation. From (2) we see that the nouns *ἀνάκλισις*, *στᾶσις*, etc., being *θέσεις*, come under relation; but the infinitives *ἀνακείσθαι*, *ἵστᾶναι*, etc. are not *θέσεις*, and hence do not belong to relation. They are derived from the *θέσεις*, and according to (3) are classed under *κείσθαι*. Evidently Aristotle uses the infinitive to represent the verb as a whole, for in (1) the example of *κείσθαι* is not the infinitive, but the third person singular present of the indicative. Standing for the verb as a whole, the infinitive in (2) represents the concrete, as against the nouns *ἀνάκλισις*, *στᾶσις*, etc., which denote the abstract.

In the paraphrase of Averroes the following points are worth noticing. The present indicative in (1) is rendered by the participle in (1a). This is due to the Arabic text Averroes used. Isaac ben Honein (ed. Zenker, 5) has also the participles *متكى* *جائسا*. In (2a) Averroes renders the infini-

tives of (2) by the third person singular of the imperfect, יִסֵּב וְיַעֲמֹד וְיֵשֵׁב. This too goes back to the Arabic translation of the Categories¹; and while it is not a literal rendering of the Greek in this particular instance, it does not misrepresent the meaning of Aristotle, as we saw before, since he himself uses the finite mood in (1).

The words אֲשֶׁר בְּמֵאמַר הַמִּצֵּב are not represented in the Greek at all, but the statement is correct that the concrete, as expressed in the verb forms, comes under the category *κατηγορίας*, as we see from (1) and (3).

In (3a) Averroes adds an illustration, in which he again uses the participle (שׁוֹכֵב, יֹשֵׁב) to represent the verb form which comes under *κατηγορίας*. So far all is clear. The confusion spoken of in the beginning of this section occurs in Mantinus' Latin translation of Averroes, as it appears in the Venice edition 1574, and there is evidence, as we shall see later, that the error was much older than Mantinus. Mantinus' rendering of (2a) reads as follows:

(2b), (39a D) "Sunt quoque ad aliquid accubitus, et statio, et sessio; sed dicere sedet et iacet sunt ex praedicamento positionis; positio vero est aliquo pacto ad aliquid. Sed dicere stabit, iacebit, sedebitque, non sunt de praedicamento positionis, sed dicuntur esse ex his quibus inditum est nomen a positione; hoc est ex his quae sunt in praedicamento situs."

Apart from the three-fold division—noun, present indicative, and future indicative, for which there is no ground in the original, and which I shall discuss later, a phrase like "praedicamentum positionis" is absurd. In the Latin translation of Boetius, "positio" corresponds to *θέσις*, and "situs" to *κατηγορίας*. The latter can be called *praedicamentum*, the former

¹ Cf. Isaac ben Honein (ed. Zenker, 20) يَضْطَاجِعُ أَوْ يَقُومُ أَوْ يَجْلِسُ.

not. *Positio* is only a species under the *praedicamentum* "ad aliquid", not itself a *praedicamentum*. We must assume that by the phrase "praedicamentum positionis", however incompatible the two terms in juxtaposition, the writer meant either what Aristotle calls $\theta\acute{\epsilon}\sigma\iota\varsigma$, or what he calls $\kappa\epsilon\tilde{\iota}\sigma\theta\alpha\iota$. Now from the last sentence, where "praedicamentum positionis" is contrasted with "praedicamentum situs", the only conclusion to be drawn is that he means by the former expression $\theta\acute{\epsilon}\sigma\iota\varsigma$, since there is no doubt at all that the latter is $\kappa\epsilon\tilde{\iota}\sigma\theta\alpha\iota$. But if so, the words "sed dicere sedet et iacet sunt ex praedicamento positionis" are in direct contradiction to (1), where Aristotle distinctly tells us that $\acute{\alpha}\nu\acute{\alpha}\kappa\epsilon\iota\tau\alpha\iota$ and $\acute{\alpha}\lambda\theta\eta\tau\alpha\iota$ belong to $\kappa\epsilon\tilde{\iota}\sigma\theta\alpha\iota$. Besides, the distinction made between present and future is absolutely without foundation. It is clear, therefore, that the Latin passage is hopelessly confused. The question is how did it come to be confused, and the answer is not far to seek. It is due in the first place to a confusion between $\theta\acute{\epsilon}\sigma\iota\varsigma$ and $\kappa\epsilon\tilde{\iota}\sigma\theta\alpha\iota$, in the second, to the fact that the Hebrew imperfect is used both as a present and as a future, and in the third place, to Averroes' rendering of (3), in (3a).

In Greek, as was said before, $\kappa\epsilon\tilde{\iota}\sigma\theta\alpha\iota$ and $\theta\acute{\epsilon}\sigma\iota\varsigma$ are distinct. The former is the name of one of the categories, the latter that of a species under the category of relation, and it also plays a part in the division of quantity into $\theta\acute{\epsilon}\sigma\iota\nu$ ἔχον and $\theta\acute{\epsilon}\sigma\iota\nu$ οὐκ ἔχον. In the Latin of Boetius, *situs* = $\kappa\epsilon\tilde{\iota}\sigma\theta\alpha\iota$, and *positio* = $\theta\acute{\epsilon}\sigma\iota\varsigma$. In the Arabic of Isaac ben Honein, موضوع = $\kappa\epsilon\tilde{\iota}\sigma\theta\alpha\iota$, and وضع = $\theta\acute{\epsilon}\sigma\iota\varsigma$, and the distinction is kept throughout. But one sees that the roots are the same in the two words, and the danger is present of their running together. In the Hebrew of Anatoli, the terms, as found in Lp, are הנחה = $\kappa\epsilon\tilde{\iota}\sigma\theta\alpha\iota$, and נצב = $\theta\acute{\epsilon}\sigma\iota\varsigma$. But the distinction is not kept, and

one is used for the other. Thus Lp 12*a* 10 = Categ. 4*b* 21—2, we have properly מצב = θέσις; Lp 12*a* 25—6 = Categ. 5*a* 15—16, we find הנחה = θέσις, and still further we have מצב = κείσθαι, and there is a heading מאמר המצב (= κατηγορία τοῦ κείσθαι). The confusion is now complete, and it probably led to the interpolated clauses in (3*b*), which is a translation from the Hebrew, as follows.

The phrase in (2*a*) וההסבה והעמידה והישיבה הם מן המצב was understood to mean ממאמר המצב. This is at variance with (1*a*), where as an example of מאמר המצב or הנחה, as it is there called, are given the participles מסב ויושב not the nouns הסבה ישיבה. Hence the interpolation of a clause, as the Latin has it, “sunt quoque ad aliquid” before “accubitus et statio et sessio”. Then a subject had to be found for the phrase (2*a*) הם מן המצב, and, in accordance with (1*a*) and (3*a*), the words interpolated again were 'מסב ויושב, which somehow became in the Latin “sed dicere sedet et iacet”, while the words יסב ויעמוד וישב were taken as futures, and the Latin has “stabit, iacebit sedebitque”.

Now it will be easily seen that, according to this new arrangement, the last sentence in (2*a*) contradicts itself. In the sentence before the last we are told, according to the interpolated reading, that the participle, (or the present indicative after Mantinus), belongs to κείσθαι or מן המצב = ממאמר המצב. Then in the last sentence it is said that the future is not מן המצב (= ממאמר המצב = κείσθαι), but belongs to those things whose names are derived from מצב, i. e., to those things which are במאמר המצב = κείσθαι. This is a plain contradiction — the future is not κείσθαι, but it belongs to those things which are κείσθαι! This difficulty led Gersonides, who

¹ Such was the reading of the Hebrew text of Averroes which Gersonides used. Cf. Venice edition 14*a* C, “et accubans est de praedicamento positionis”.

had the interpolated text, to construe the last relative clause, **מֵאֲמָר הַמִּצַּב**, as in apposition with **הַמִּצַּב** preceding it, whereas the form of the sentence requires us to coordinate the clause in question with **שֶׁנִּגְזַר הַשֵּׁם וְכוּ**, both of which are dependent on **הַדְּבָרִים**.

Messer Leon (289b) has a correct text but does not get the proper sense out of it, understanding **מִן הַמִּצַּב** as = **מֵאֲמָר הַמִּצַּב**, and saying, what Gersonides wrongly, though excusably, said before him, that **יֵסֵב יֵשֵׁב וְיַעֲמֹד** belong to the category **שִׁיעָל** (= *ποιεῖν*), though it is at variance with (3), where Aristotle distinctly asserts that the "denominatives" treated in (2) belong to *κεῖσθαι*. It is strange also that Messer Leon does not note the different reading of Gersonides.

Averroes' misunderstanding of Categ. 6b 32—37 is due in the first place to an ignorance of Greek, and secondly, to the fact that the expression l. 33 *πλὴν τῇ πτώσει ἐνίοτε διοίσει κατὰ τὴν λείξει*, reminds one of the similar expression used in the definition of *παράνυμα* (Ia II) *ὅσα ἀπὸ τινος διαφέροντα τῇ πτώσει τὴν κατὰ τοῦνομα προσηγορίαν ἔχει*. Averroes accordingly takes the line in question to mean that some correlatives have a common root, and one is derived from the other by a change in inflection. This happens to suit the examples that follow, in Greek, Arabic as well as Hebrew — *ἐπιστήμη*)(*ἐπιστητόν*; *αἰσθησις*)(*αἰσθητόν*; **מוֹחַשׁ**)(**חֹשׁ**; **יָדוּעַ**)(**יָדִיעָה**; **مَحْسُوس**)(**حَس**; **مَعْلُوم**)(**עֵלֵם**. Strange to say, Messer Leon acquiesces in the error of Averroes.

Categ. 7b 31—3 reads: *ὅσον καὶ ὁ τοῦ κύκλου τετραγωνισμὸς εἶγε ἔστιν ἐπιστητόν, ἐπιστήμη μὲν αὐτοῦ οὐκ ἔστιν οὐδέπω, αὐτὸς δὲ ἐπιστητόν ἐστιν*.

Heb. Aver. (Lp 14b) renders it: **וְהַמְשַׁל בּוֹה רְבוּעַ הָעֵגוּל שֶׁהִשְׁתַּדְּלוּ בּוֹ מִי שֶׁקִּדְמוֹ מִבְּעֵלֵי הַגִּימַטְרִיָּא וְעַד עַתָּה לֹא הִגִּיעוּהוּ וְהוּא אִם הָיָה יָדוּעַ**

ידיעתו לא נמצאת עד עתה ואם הוא בלתי ידוע אי אפשר שתמצא ידיעתו עוד. Or as the Latin Averroes has it (40E.f.), “ut exempli gratia quadratura circuli, in qua conati sunt omnes geometrae priores, et adhuc non attigerunt eam, si autem est scibilis, eius scientia nondum est habita, et si non est scibilis, eius quidem scientia nunquam amplius habebitur”.

The origin of the text of Averroes is due in part to the Arabic translation of the Categories of Isaac ben Honein (if that is the one he used), which reads (Zenker, 24 line 2) for *ἔστιν οὐδέπω*, *لم يوجد بعد* = “non amplius erit”. Messer Leon (303) notes the variation from the Latin text, and prefers the latter, on the ground that a hypothetical judgment (*הקדמה הנאית*) can give no demonstration.

Heb. Aver. (Lp 15) misses the point of Categ. 8a 19—21: *ἢ γάρ τις χεὶρ οὐ λέγεται τινός τις χεὶρ ἀλλὰ τινος χεὶρ, καὶ ἢ τις κεφαλὴ οὐ λέγεται τινός τις κεφαλὴ ἀλλὰ τινος κεφαλὴ*.

It is rendered thus in the Hebrew (15), *כי לא יאמר ביד מה, הרמז אליה יד האדם מה או סוס מה אבל יאמר יד אדם או סוס ובכלל אמנם הצטרף אל המין לא על האיש*.

This the Latin Averroes (40b I) renders: “Nam non dicitur quod aliqua manus singularis sit manus alicuius hominis vel alicuius equi; sed dicitur manus hominis vel equi, et tandem relatio fiet ad species non ad individua”.

The Arabic of ben Honein is correct. It reads (ed. Zenker 25): *فانه ليس يقال في يد ما انها يد ما لانسان لكن انها يد لانسان ولا يقال في راس ما انه راس ما لشئ بل راس لشئ*. Messer Leon (306) acquiesces in the error of Averroes.

Categ. 8a 33—5: *ὁ δὲ πρότερος ὁρισμὸς παρακολουθεῖ μὲν πᾶσι τοῖς πρός τι, οὐ μὲν τοῦτό γέ ἐστι τὸ πρός τι αὐτοῖς εἶναι τὸ αὐτὰ ἅπερ ἐστὶν ἐτέρων λέγεσθαι*.

Heb. Aver. seems not to have understood it, and renders it thus (Lp *ib.*) כִּי הִתְגַּדְּרָה הָרִאשׁוֹנָה תְּשִׁיג כָּל מָה שֶׁנִּמְנָה בְּהַחֲלָת הַמַּחֲשָׁבָה מִהַמְצִטְרָף וְאִמְנָם זֹאת הִתְגַּדְּרָה תְּשִׁיג מָה שֶׁהַצִּטְרָף בְּאִמְתָּ לֹא בְּהַחֲלָת הָעֵנִין.

Or as the Latin has it (*ib.* L): "Nam sub prima definitione potest includi quicquid primo intuitu putatur esse relativum, sed sub hac definitione reponitur quicquid est vere relativum non prima consideratione levi".

Messer Leon does not note the variation.

Categ. 12a 35 ff. was not understood by Averroes. The text reads in Greek: τὸ δὲ ἐστερηῆσθαι καὶ τὸ τὴν ἔξιν ἔχειν οὐκ ἔστι στέρησις καὶ ἔξις· ἔξις μὲν γὰρ ἔστιν ἡ ὄψις, στέρησις δὲ ἡ τυφλότης, τὸ δὲ ἔχειν τὴν ὄψιν οὐκ ἔστιν ὄψις, οὐδὲ τὸ τυφλὸν εἶναι τυφλότης, στέρησις γὰρ τις ἡ τυφλότης ἐστίν, τὸ δὲ τυφλὸν εἶναι ἐστερηῆσθαι, οὐ στέρησίς ἐστιν . . . ἀντικειῖσθαι δὲ καὶ ταῦτα δοκεῖ τὸ ἐστερηῆσθαι καὶ τὸ τὴν ἔξιν ἔχειν ὡς στέρησις καὶ ἔξις . . . ὡς γὰρ ἡ τυφλότης τῇ ὄψει ἀντίκειται, οὕτω καὶ τὸ τυφλὸν εἶναι τῷ ὄψιν ἔχειν ἀντίκειται. . .

Ben Honein (ed. Zenker, 38) reads as follows: وليس ان يعدم الملكة وان يوجد الملكة عما العدم والملكة من ذلك ان البصر ملكة والعما عدم وليس ان يوجد البصر هو البصر ولا ان يوجد العمى هو العمى فان العمى هو عدم ما فاما ان يكون الحيوان اعنى فهو ان يعدم البصر وليس هو العدم فانه لو كان العمى . . . ومضنون ان هذين ايضا يقابلان اعنى ان يعدم الملكة وان يوجد الملكة كيقابل العدم والملكة . . . فانه كما العمى يقابل البصر كذلك الاعمى يقابل البصير.

The infinitives τὸ ἐστερηῆσθαι and τὸ τὴν ἔξιν ἔχειν are expressed by the periphrasis ان with the imperfect, which may suggest the subject of the action. Similarly the Greek

τὸ δὲ τυφλὸν εἶναι is rendered by *ان يكون الحيوان اعمى*, lit., "if an animal is blind". But it is especially Ben Honein's rendering of *οὕτω καὶ τὸ τυφλὸν εἶναι τῷ ὁψὶν ἔχειν* by *كذلك الاعى* "so the blind is opposed to the seeing", that must have caused Averroes to interpret the passage as he did (Lp 18):

ואין מי שיעדר ממנו הקנין ואשר ימצא בו הקנין הוא ההעדר והקנין והמשל בזה שהראות קנין והעורון העדרו ואין בעל הראות הוא הראות ולא בעל העורון הוא העורון ... ואמנם כמו שההעדר והקנין הם שני מקבילים כן המתוארים הם גם כן שני מקבילים שאם העורון מקביל הראות העור מקביל הרואה.

Or in Latin (55bH): "Nec qui habitu privatur neque qui habitum habet, dicitur privatio vel habitus, ut exempli gratia, visus est habitus, caecitas vero privatio eius, habens itaque visum non est visus, neque caecus est caecitas... Verumtamen quemadmodum privatio et habitus sunt duo opposita, ita quoque illa quae per ipsa denominantur sunt duo opposita, nam si caecitas opponitur visui, caecus quoque opponitur videnti".

Messer Leon acquiesces here also.

§ 12. SOURCES OF MESSER LEON.

Among the authors, ancient and modern, quoted in the course of the work by Messer Leon, apart from Aristotle, Porphyry, and Averroes are Plato and the Platonists, the Peripatetics, Archytas, Simplicius, Boetius, Avicenna, Algazzali, Albertus Magnus, Burleigh, Gilbertus Porretanus and Gersonides.

Of these, his citations of Avicenna (אבן סינא), Algazzali (אבן חמד), Albertus Magnus (אלברטי), and Gilbertus Porretanus are so few and indefinite that nothing can be made

out from the quotations themselves as to the extent of his knowledge of these authors¹. The last he never calls by name, but always as (מחבר שש ההתחלות or בעל), "author of the 'Liber Sex Principiorum'."

Plato (אפלטון) he knew only by hearsay, and never mentions any of his works. He was, however, familiar with his theory of ideas and the discussions concerning them, as we saw above. Once (f. 354 b) he quotes the Platonists (האפלטוניים), on the authority of certain commentators (לפי מה שספרו מזה) (קצת המפרשים²), that the *λόγος* is not conventional, as Aristotle says in the *Perihermenias*, but by nature (מורה בטבע).

The peripatetics he calls by their Arabic name משאים, but does not know the meaning of the word (cf. above p. 28). His knowledge of the other authors mentioned above, I shall discuss a little more at length in the following.

Aristotle: Of Aristotle (אריסטו) he shows an intimate knowledge, and seems to have studied him diligently³. He is to him "the philosopher", and he quotes him on almost every page. Most frequently he quotes the *Metaphysics* (ספר מה שאחר), the *Physics* (שמע טבעי = *Φυσικὴ ἀκρόασις*), the *Ethics* (המדות), *On the Heavens* (העולם), and the logical works — *Prior Analytics* (דיקש), *Posterior Analytics* (מופת), *Topics* (נצוח), and *Sophistic Refutations* (הטעאה). But he also cites other minor treatises of Aristotle.

Simplicius: This commentator (שמפליציאו) he mentions twice, and in both instances together with Boetius whom he speaks of more frequently. Messer Leon could have read Simplicius; for, although he knew no Greek, there was a Latin translation of Simplicius made as early as 1266 (cf. Jourdain, *Recherches sur les Traductions Latines d'Aristote*,

¹ See, however, below pp. 78, 80.

² Cf. below p. 80.

³ But see below p. 80 f.

p. 73). The question is whether he read him, and to this the following discussion is devoted.

Fol. 236*b*, he quotes Boetius' and Simplicius' classification of "homonymy" (שהויה) into homonymy "casu" and homonymy "consilio". An example of the former is the name Moses, as denoting homonymously a person in Jerusalem, and another in Rome. The latter is illustrated in the term "man" as applied to a real person, and a picture on the wall.

לפי מה שכתבו בוואיצאו ושמפליציאו השתוף הוא על שני פנים אם מצד המקרה ואם מצד העצם (העצה) והשתוף שהוא מצד המקרה הוא כאשר יונה שם אחד לעינים מתחלפים מבלתי התיחס מה או הדמות ובה האופן יונה זה השם משה לאיש אחד העומד בירושלים ולאיש אחר העומד ברומי והשתוף שהוא מצד העצם (העצה) הוא כאשר נעשה זה להתיחס מה או הדמות כאמרנו אדם על האדם האמיתי ועל המצויר בכותל

The respective passages in Simplicius and Boetius referred to are the following: (Simpl. *In Categ. Basileae* 1551, 7*b* Ef): διχῶς λέγεται τὰ ὁμώνυμα τὰ μὲν γὰρ ἐστὶν ἀπὸ τύχης (מצד המקרה), ὡς Ἀλέξανδρος ὃ τε Πάρις καὶ ὁ Μακεδὼν τὰ δὲ ἀπὸ διανοίας (מצד העצה) ὅταν διανοηθεῖς τις αἰτία ἐνεκὲν τινος, τὰ αὐτὰ ὁνόματ' ἐπιθῇ, and Boetius (*In Categ. ed. Migne*, 168*b*): "Aequivocorum alia sunt casu, alia consilio. Casu ut Alexander Priami filius et Alexander Magnus. . . Consilio vero ea quaecumque hominum voluntate sunt posita."

The second class of homonymy is further subdivided in Simplicius as well as in Boetius. This alone, however, would not prove that Messer Leon did not know Simplicius at first hand; for he refers us for a complete classification to his compendium: וזה ההבאר בקצורי באור שלם.

The second citation of Simplicius, again in the company of Boetius, shakes somewhat our confidence either in Messer Leon's knowledge of Simplicius or in his trustworthiness in quoting.

Fol. 308*b*, he attributes to these two commentators the

statement that *ἔξις* and *διάθεσις* differ neither in genus nor in species but in number, for their difference is that of the youth and the grown up man. Just as the youth is weak in the degree of "manness", so the *διάθεσις* is a weak and imperfect *ἔξις*. And just as the man attains to the perfection of the species through years, so *ἔξις* is a perfect *διάθεσις* difficult to remove. וזה מה שאמרו בואיצואו ושמיפליצואו שהענין והקנין לא יתחלפו לא בסוג ולא במין כי אם במספר למה שהם מתחלפים התחלפות הנער והאיש כי כמו שהנער הוא חלוש במדרגת האנושות כן הענין הוא קנין חלוש וחסר וכמו שהאיש בא אל שלמות המין מצד השנים כן הקנין הוא קנין (ענין) read שלם וקשה ההעתקה.

This statement is true as far as Boetius is concerned. *Op. cit.* 241 he says: "Reliquum est igitur ea (sc. habitum et dispositionem) neque genere, neque specie differre, sed numero ... quemadmodum ipse Socrates dum esset parvulus, post vero pubescens a se ipso distabat. Eodem quoque modo habitus et dispositio."...

Simplicius says distinctly that they do not differ in number either, but in time (*op. cit.* 59a B): τῶν δὲ ἑξέων καὶ διαθέσεων οὐχ ὥς δύο εἰδῶν ἀκούειν χρῆ, διαφοραῖς εἰδοποιοῖς διωρισμένων, ὥς ἄνθρωπος διώριστα καὶ βοῦς, ἀλλ' ὥς ὁ ἀρτίτοκος πρὸς τὸν ἀκμᾶζοντα διενήνοχε ... ἀλλ' οὐδὲ ἀριθμῷ διαφέρει ἀλλήλων ὥσπερ Σωκράτης Πλάτωνος· οὐδὲν γὰρ ἰδιόζον πλῆθος συνδραμὸν τὴν καθ' ἀριθμὸν διάστασιν ἀπεργάσατο, ἀλλὰ χρόνῳ διαφέρει, ὥς τὸ ἐλιγοχρόνιον λευκὸν τοῦ πολυχρόνιου.

When we find Messer Leon (f. 277) speaking of Aristotle's following in the Categories the views of Archytas (properly Pseudo-Archytas) (אַרְכִיטָא), we are again inclined to believe that he knew Simplicius, for the latter is the *locus classicus* for our knowledge of the views of Pseudo-Archytas. But a more careful examination of those passages in which Archytas is referred to, and a comparison of them with the commentary of Simplicius lead to the conclusion that his authorities for

the statements in question must have been other than Simplicius; and that if he had read Simplicius carefully, he would have had to modify one of those statements.

In all there are two references in Messer Leon to Archytas. The first (f. 277) is of a general character, and might very well have been gathered from Simplicius. It is, as was said on the preceding page, to the effect that Aristotle in the *Categories* does not always give his own views, but those current at the time, and particularly those of Archytas. שכבר אמרו קצת המפרשים בזה המקום ובספר מה שאחר שהפילוסוף לא חשש להביא בזה הספר מאמרים מה בלתי אמתיים למה שהוא רדף הנה הדעות המפורסמות בזמן ההוא וביחוד דעת ארכיטא ולפעמים המהברים יניחו הכוב עד יתבארו הדברים במקומם הראוי.

This agrees very well with the opinion of Simplicius (*op. c.* 13 A), καὶ ὥς τοῖς Πυθαγορείοις ἀκολουθῶν, ἀφ' ὧν τὴν περὶ τῶν δέκα γενῶν διδασκαλίαν παρέλαβεν. In other places he speaks of Ἀρχύτας ὁ Πυθαγόρειος, and hence τοῖς Πυθαγορείοις probably is a reference to the same person.

The second reference to Archytas in Messer Leon is found fol. 278*b*, and is more specific. Some authorities object to Aristotle's putting λόγος in a class by itself alongside of χρόνος and ἀριθμός, arguing that if considered from the point of view of duration, λόγος is measured by time; if as an aggregate of syllables, it comes under number; in neither case is it a class by itself. The opinion of these writers is that here again Aristotle is not presenting his own view but that of Archytas, as proof of which is cited the fact that in the *Metaphysics* λόγος is not mentioned as one of the species of quantity.

That Archytas made λόγος a class by itself, no one who read Simplicius could be guilty of saying. For Simplicius has a quotation from Archytas' work, καθολικαὶ λόγοι, in which the latter classifies ποσόν as follows (*op. c.* 32*b* Z): τῆς ποσό-

τητος διαφορὰ τρεῖς· τὸ μὲν γὰρ αὐτᾶς ἐντὶ ἐν ροπή . . . τὸ δὲ ἐν μεγέθει . . . τὸ δὲ ἐν πλάθει.

Here λόγος does not appear, and to make sure that Simplicius did not omit it, we find him further on (33 A) quoting Iamblichus' criticism of Aristotle's omission of ροπή, on the ground that if λόγος is taken as quantity, so should ροπή.

But a reference to Burleigh will settle the question both for Simplicius and Boetius; so I shall leave the decision to the end of the following section.

Boetius (בּוֹאִיְצִיּוֹ): (see also under Simplicius). Here the question becomes, as far as the quotations themselves go, more difficult to decide. For, on the one hand, the references to this author are more frequent and more definite than to any other except Aristotle and Averroes. On the other hand, some of these very references are inexact, some being the very opposite of Boetius' statements; and besides, he does not avail himself of Boetius in difficult passages, where a reference to the latter would settle the question. This latter applies also to his use of Simplicius (cf. above). I will illustrate these in detail.

Besides the commentary of Boetius on the Categories, he quotes (f. 274) the *De Arithmetica*, that discrete quantity is prior to continuous quantity. וְהַקְטַנָּה הַתְּפִרְסָמָה מְרַבְרִי בּוֹאִיְצִיּוֹ. בחלק הראשון מן המספר שלו באמרו שהכמה המתחלק קודם למתדבק. The passage referred to is no doubt the following (*Op. cit.* 1082 B): "Si enim numeros tollas, unde triangulum vel quadratum, vel quidquid in geometria versatur? . . . At vero, si quadratum triangulumque sustuleris, omnisque geometrica consumpta sit, tres et quattuor aliorumque numerorum non peribunt vocabula."

Twice he refers to the *De Divisione* (סֵפֶר הַחֲלֻקָּה). Steinschneider (*op. c.* 84, § 31) is wrong in identifying הַחֲלֻקָּה with the *De Differentiis Topicis*. *Differentia* is in Hebrew

not הלוקה but הברל. The ס' הברלים mentioned by Steinsch. (*op. c.* 467, § 278 and *Ann.* 45) is probably the *De Differentiis Topicis*, but the ס' ההלוקה of Messer Leon is the *De Divisione*, as we shall see.

The first citation is found (fol. 205) in reference to the importance of the five universals, genus, species, difference, property and accident, for division. והנה ידעת אלה החמשה אין ספק שהוא הדרכה אל אמתות החלוקה וזה מבואר מאד מספר החלוקה שעשה בואיציאו.

The passage in question is found *De Div.* 875 Df.: "Quam magnos studiosis afferat fructus scientia dividendi, ... docet ... ab eodem (sc. Porphyrio) per hanc (sc. scientiam dividendi), introductionis laudata in Categorias utilitas. Dicit enim fore necessariam, generis, speciei, differentiae, proprii accidentisque peritiam, cum propter alia multa, tum propter utilitatem quae est maxima partiendi."

The second reference to the *De Divisione* is found fol. 252 b¹. מבואר ... מדברי ... בואיציאו בספר החלוקה שעשה באשר יפורסם שחלוקה הסוג אל המינים היא חלוקה בעצם.

"It is clear from the words of Boetius in the *De Divisione* which he composed, where it is explained that the division of a genus into its species is a division *per se*." (*Boet. De Div.* 878 D): "Omnis enim vocis et generis et totius divisio *secundum se* divisio nuncupatur."

Fol. 313b, Messer Leon quotes Boetius' distinction, in his commentary on the Categories, between figura (תמונה) and forma (תאר).

וראוי שהדע שבואיציאו הוא מחלק הנה בין התמונה והתאר ואמר שהרצון בתאר היחס הנאות מן האברים אשר למענם ואמר בבח שהוא יפה או היחס הבלתי נאות אשר למענו ואמר מבויער והנה יקח התואר בזה המקום

¹ Steinsch. *op. cit.*, p. 84, § 31 and *Ann.* 273, for 252 read 252 b; for 276 b read 274.

בעד היופי והכעור אשר ביחוד יאמר בבעל חי והתמונה תאמר בשוה בבעלי חיים וזולתם כי הוא אומר הסגר הענין תוך גבולים מוגבלים ויראה מה שאמר בואיצ'או בכאן בענין התואר מלשון הפסוק הלוקח איתו בעבור תכונת האברים באופן ימשך ממנו היופי או הכעור כמו תוארו כתואר בני המלך יפת תואר ויפת מראה רעות תואר מאד וזולתם.

The reference is found in Boetius, *In Categ.* 250 Df.: "Est autem figura ut triangulum vel quadratum, forma autem ipsius figurae quaedam qualitas est, ut figura quidem est triangulum vel quadratum, forma autem ipsius trianguli vel quadrati qualitas, unde etiam formosos homines dicimus. Figura enim quaedam vel pulchrior vel mediocris, vel alio quodammodo constituta, qualitas formaque nominatur."

Fol. 341, in the commentary on the Interpretation, he quotes Boetius' commentary on the Categories, as follows: ואמר בואיצ'או בספר המאמרות שהפילוסוף הוא מספר הנה ובספר המאמרות על בחינות מתחלפות מחקולות הפשוטים כי במאמרות ידובר בהם מצד שהם שמות הדברים ובוה הספר מצד שהם שמות לשמות אל מהשם והפעל וזולתם.

(*Boetius, In Categ.* 163 A): "Sed hoc interest quod illic (sc. in Perihermenias) figuras vocabulorum dividit, in hoc de significationibus tractat."

If we had only these quotations, we should have no hesitation in saying that Messer Leon read Boetius at first hand. For the references are definite, naming the title of the work in which they are found, and giving his thought pretty exactly. But there are other references to Boetius, some of which are inexact, while others even state the opposite of what Boetius says. Thus f. 237c (omitted in Mn), he cites Boetius' classification of "commune" (משותף). ואין ראוי שיעלם כי כבר אמר בואיצ'או בזה המקום שהדבר המשותף לרבים יתכן שיחיה על א' מנ' פנים אם שהדבר ההוא נחלק לחלקים מתחלפים וישתמשו ממנו אנשים מתחלפים לפי החלקים ההם ובוה האופן נאמר במעין שהוא משותף אל כל בני העיר אם שיחיה הדבר ההוא בבחינת כלו נלקח לתועלת

והשתמשות לאנשים רבים בזמנים מתחלפים ובוה האופן יאמר שהסוס משותף לבעלים רבים אם שהדבר ההוא ישתמשו בו דברים נפרדים בבחינת כלו בזמן אחד בעצמו וזה יתכן על שני פנים אם שיהיה זה הענין מעצמות הדברים ההם אם שיהיה חוץ מעצמותם ואם הוא ממה שיגביל מזהם ועצמותם בזה האופן יאמר שהעליון הוא משותף לתחתון ואם הוא חוץ מעצמותם בזה האופן נאמר שהקול הנשמע מאנשים מתחלפים הוא משותף להם למה שהקול בבחינת כלו בזמן אחד בעצמו יבוא להשמעות אונים מאנשים רבים והנרצה הנה במשותף באומרו כולל ומשותף הוא לפי זה האופן האחרון לפי ששם אחד יורה בזמן אחד בעצמו על דברים מתחלפים.

The passage in Boetius reads as follows (*Op. cit.* 164 D): "Commune quoque multis dicitur modis. Dicitur commune quod in partes dividitur et non iam totum commune est, sed partes eius propriae singulorum, ut domus. Dicitur commune quod in partes non dividitur sed vicissim in usus habentium transit, ut servus communis vel equus. Dicitur etiam commune quod utendo cuiusque fit proprium, post usum vero, in commune remittitur, ut est theatrum, nam cum eo utor, meum est, cum inde discedo, in commune remisi. Dicitur quoque commune quod ipsum quidem nullis divisum partibus, totum uno tempore in singulos venit, ut vox vel sermo ad multorum aures uno eodemque tempore totus atque integer pervenit."

If we compare the two, we notice that Messer Leon omits the sense in which the term is applied to a theater, and substitutes for it the community of the upper and the lower (genus and species?). Besides, he makes a three-fold division, with a subdivision of the third into (1) essential, and (2) unessential community; whereas Boetius, following the Greek commentators, Porphyry, Simplicius, etc., has a four-fold division with no subdivisions.

Again fol. 290*b*, he quotes Boetius as preferring the term "*ad aliquid*" (אל דבר) to "*relatio*" (צורה) for the third category.

ואמר בוא'ציאו ואלברטו בזה המקום שיותר נכון שיקרא זה הסוג אל דבר ממה שנאמר בו שהוא הצרוף.

Whereas Boetius (*op. cit.* 217 B) distinctly says: "Sive autem relativa dicamus, sive ad aliquid, nihil interest."

These errors, however, can be explained as an accidental confusion of authorities, but the following argument against his direct knowledge of Boetius is a more serious one.

Categ. 15a 30, Aristotle makes mention of the *γνώμων* as producing *αἰξίσις* without *ἀλλοίωσις*. The Hebrew term used by Jacob Anatoli for *γνώμων* is *מסומן*, the meaning of which Messer Leon seems to gather from the context rather than from knowledge, as can be seen from the expression *לפי מה שאחשוב*. (338b) *והרצון במסומן לפי מה שאחשוב התוספת שנעשה במרובע מה עד שב גדול ממה שהיה באחד מן הדרכים שיוסיפו על המרובע כפי מה שתגזור החכמה הנזכרת*.

Now, both Boetius and Simplicius describe the *γνώμων* in detail by means of a figure; and if he read either one of these, he would scarcely have expressed himself as he did, relying on his own idea of the matter (*לפי מה שאחשוב*). Gersonides also was not certain of the meaning of the term, and he also infers the meaning from the context.

(60b K) "Huius dicti sensus est, *ut reor*, quod cum in aliqua figura oppositorum laterum, addatur signum aliquod, ita ut illa figura cum illo signo sit similis primae figurae. Et hoc quidem fit cum protrahatur diameter illius figurae, et addatur in uno duorum laterum eius illemet diameter secundae figurae oppositarum costarum cum illa additione, ut declarat Euclides."

The truth of the matter is that Messer Leon, whether he knew Boetius and Simplicius or not, did not take the trouble to look them up when he wrote his commentary. With very few exceptions he quotes Boetius when Burleigh quotes him ;

in company with Simplicius, if that is the case in Burleigh, and where the opinions of Simplicius or Boetius are mentioned, the wording coincides with Burleigh's citation, rather than with the original. Not knowing the original, he sometimes misrepresents it by dealing freely with the account Burleigh gives in his own words, and by omitting here and there a phrase which he thinks unessential. A comparison of the passages in Burleigh corresponding to those of Messer Leon, Boetius, and Simplicius above named will at once show the truth of the above statement.

Thus compare with the passages quoted on page 66 the following from Burleigh, f. 19: "Est notandum secundum Boetium et Simplicium quod aequivocationum alia est a casu, alia est a consilio. Aequivocatio a casu est quando idem nomen imponitur diversis absque aliqua ratione similitudinis vel parentelae. Et sic hoc nomen Joannes imponitur alicui existenti hic et alicui existenti Romae. Aequivocatio consilio est quando aequivocum significat plura propter aliquam similitudinem vel habitudinem ad aliquid unum et sic animal est aequivocum ad animal pictum et ad animal verum."

Is there any doubt as to the source of Messer Leon's information?

The discussion of the difference between *ἔξις* and *διάθεσις* appears in Burleigh, f. 38*b*, as follows: "Boetius et Simplicius dicunt quod habitus et dispositio non differunt specie nec genere sed solummodo numero, unde dicunt quod habitus et dispositio differunt sicut differunt vir et puer. Differunt etiam quia dispositio est habitus infirmus sed habitus est firma dispositio."

Here too it is clear that Burleigh, and not Boetius or Simplicius, is the source of Messer Leon's statement. It is

true that in this case Burleigh too misquotes Simplicius, but we need not enter into the causes of that here.

The authority for Messer Leon's statement that some of the views in the *Categories* are borrowed from Archytas must be sought elsewhere, as the only passage in Burleigh to that effect (cf. above p. 41 note 1) is general and does not mention Archytas.

The citation of Boetius' *De Arithmetica* (69) is thus given in Burleigh, f. 29: "Probo minorem per Boetium primo Arithmeticae suae, quantitatis discreta prior est quam continua." A comparison of the three shows clearly that Messer Leon's citation is a literal translation from Burleigh.

Of the two references to Boetius' *De Divisione*, the first is not found in Burleigh. The second is in Burleigh, and it is perfectly clear that the latter is the source. The discussion apropos of which Boetius is quoted is the same, and the wording is the same, and slightly different from the original. The discussion in question is an argument against conceptualism, on the ground that if genus and species are not real things but concepts, they are accidents, and the division of a genus into its species is not a division *per se* but *per accidens*; which is contrary to the opinion of Boetius, or, in the words of Burleigh, f. 46: "quod est contra Boetium in Libro Divisionum qui dicit quod divisio generis in species per differentias est divisio per se . . ."

The wording of the original of Boetius is slightly different, as can be seen on p. 70.

Boetius' distinction between *figura* and *forma* (cf. above pp. 70—71) is thus referred to by Burleigh, f. 40b: "Intelligendum est hic secundum Boetium quod forma accipitur in proposito

pro forma secundum quam aliquid dicitur formosum et non pro forma secundum quam aliquid dicitur formatum. Unde forma accipitur in proposito pro compositione corporali vel dispositione membrorum secundum quam aliquis dicitur formosus vel deformis; quia ex convenienti dispositione membrorum dicitur aliquis formosus, et a dispositione inconvenienti dicitur aliquis deformis ... unde forma in proposito secundum Boetium accipitur pro pulchritudine vel turpitudine, et quia pulchritudo et turpitudine solum proprie reperiuntur in animatis, ideo forma in proposito solum convenit animatis; sed figura indifferenter reperitur in inanimatis et animatis. Unde figura est terminus et clausio rei quantae, et talis indifferenter reperitur in animatis et in inanimatis ut dictum est."

Here again a comparison of the three passages (70—71) will decide the question.

The next quotation mentioned above (71) appears as follows in Burleigh, f. 64*b*: "Notandum est secundum Boetium Super Praedicamenta et hic quod philosophus in praedicamentis determinat de vocibus incomplexis quae sunt nomina rerum, et hic determinat de incomplexis quae sunt nomina nominum ... cuiusmodi sunt nomen et verbum."

The difficulty in connection with the next quotation discussed above, pp. 71—72, becomes perfectly clear when we compare Burleigh, f. 19: "Commune dicitur dupliciter secundum Boetium, uno modo quod in partes dividitur et participatur a diversis secundum diversas partes, et sic fons in civitate est quid commune omnibus morantibus in civitate. Secundo modo dicitur aliquid commune quod secundum se totum in diversis temporibus transit in usus diversorum. Et sic equus dicitur communis et molendinum. Tertio modo

dicitur commune quod totum in eodem tempore ad singulos venit. *Et illum modum distingo ulterius*, quia vel illud commune extra substantiam eorum quibus est commune, vel de substantia illorum quibus est commune, ita quod declarat quiditatem illorum, sic superius est commune respectu inferiorum. Primo modo vox audita diversis dicitur communis quia simul venit ad aures diversorum et illo modo accipitur in proposito, nam eadem vox simul secundum se totam significat diversa."

This passage shows clearly not only where Messer Leon obtained his information, but also how he managed to misrepresent Boetius, though Burleigh, who was his authority, was not guilty of such misrepresentation. All that Messer Leon did was to omit as unessential the words italicized in the above quotation, "*et illum modum distingo ulterius*", which means that the further subdivision which follows the italics no longer belongs to Boetius, but is original with Burleigh.

The next passage quoted above pp. 72—3, where he deliberately attributes to Boetius a view the latter distinctly repudiates, is to be similarly explained by a reference to Burleigh, f. 34: "Sciendum est tamen quod Albertus et Boetius dicunt quod genus generalissimum istius praedicamenti *convenienter* assignatur per hoc nomen ad aliquid." Burleigh's statement is perfectly correct, and Messer Leon's is not. And the reason is a very simple one. Messer Leon, in his zeal in favor of the term "ad aliquid" as a name for this category, not knowing the original of Boetius, (or Albertus Magnus either, probably, for that matter), said a little too much. Where Burleigh says "*convenienter* assignatur", etc., Messer Leon says "*convenientius* quam . . . relatio", יותר נכון שיקרא זה הסוג אל דבר כמה שנאמר בו שהוא הצורך.

Finally the last argument drawn from his apparent ignorance of the meaning of מסיבין (= γνῶμων), and his attempt to gather it from the context is confirmed on a comparison of Burleigh, f. 49*b*, who states it in the same general way, without any detailed explanation; thus: "Probatio assumpti, sc. quod augmentatio potest esse sine alteratione nam quadrangulus crescit seu augetur addito gnomone, i. e. supplemento vel addimento manente quadrangulo in specie quadranguli et tamen quadrangulus addito gnomone non alteratur."

It is now perfectly clear that Messer Leon did not independently consult Boetius or Simplicius, and it is pretty safe to say that the same is true of the other names mentioned above. Thus we saw Albertus Magnus coupled with Boetius, where it was clear that the whole passage was borrowed from Burleigh.

A second quotation of Albertus Magnus' three-fold definition of מצב (= *positio*) (f. 278*b*) is also borrowed from Burleigh, f. 28*b*.

Messer Leon's quotation (f. 312) of Gilbertus Porretanus' (בעל שש ההתחלות) division of *passio* is also taken from Burleigh, f. 40, who quotes him also not by name, but as "*auctor sex principiorum*".

Averroes: Next to Aristotle, Averroes (בן רשד) is his authority and he quotes him frequently, naming his "great" commentary on the Physics and the *De Substantia Orbis* (ס' הנקרא עצם הגלגל) (f. 275*b*).

An interesting passage is found fol. 273, where Messer Leon, following Burleigh, makes a reference, it seems to me, to the "great" commentary of Averroes on the Categories. If so, the two passages in Messer Leon and Burleigh are very important, for the latest authorities on Averroes—Renan, Munk, and Steinschneider, know of no "great" com-

mentary on the Categories; while Messer Leon, or at least Burleigh, seems to have read it. The passage in question was cited in full above pp. 52—3, and its original in Burleigh reads as follows (f. 28 b): “Probat quod partes loci copulantur ad terminum communem, sc. ad eundem ad quem copulantur partes corporis. Sed illud non videtur esse verum, quia partes corporis copulantur ad superficiem intrinsecam in corpore locato tamquam ad terminum communem, sed partes loci non copulantur ad superficiem intrinsecam in corpore locato quia sic esset locus divisibilis secundum profunditatem quod est contra philosophum. *Dicendum secundum quod dicit Averroes hic quod philosophus non determinavit adhuc de loco secundum veritatem ideo loquitur hic de loco secundum opinionem aliorum ponentium locum esse spacium cum spacium sit divisibile secundum tres dimensiones, locus esset divisibilis similiter secundum eos et sic partes loci essent ubicumque cum partibus corporis, per consequens partes loci copulantur ad superficiem intrinsecam corporis locati; loquendo tamen de loco secundum veritatem secundum quod locus est ultimum corporis continentis locatum, sic partes loci copulantur ad lineam existentem in superficie corporis locantis, et non ad superficiem intrinsecam corporum locatorum vel locati corporis.*”

It will be seen that the word “hic” in the italicized part of the passage can refer only to the Categories. Now in the middle commentary Averroes says no such thing. Therefore it must be found in some other work of Averroes on the Categories. Again Messer Leon, who in this case for once does not follow Burleigh slavishly, and seems to have had the original of Averroes before him (of course in the Hebrew translation) adds בבואירו הארוך, “in his great commentary”. *Ergo* Averroes must have written a great commentary on the Categories, seen by Burleigh and by Messer Leon.

Burleigh: (בורלייג). The reader who has followed me as far as this, will have suspected no doubt, that Messer Leon did more than consult Burleigh in the composition of his work; and his suspicions will be confirmed by what is to follow. Messer Leon not only consulted Burleigh, but he slavishly followed him, bodily translating whole passages from the "*Super Artem Veterem Expositio*", and not even taking the trouble in most cases to recast them in his own crucible. He quotes the authorities that Burleigh quotes, misrepresenting their opinions when Burleigh misrepresents them, and sometimes also when the latter is free from this fault¹. It is safe to say that with few exceptions, all the discussions, arguments, observations and comments, except the bare paraphrase of Averroes' text are gotten from Burleigh's work mentioned above. And he does all this without giving Burleigh any credit for it. Burleigh's name never occurs in the work of Messer Leon except once in an interpolation discussed above (p. 9). In six instances in the Categories² he cites Burleigh's opinions as those of "some commentators" (קצת המפרשים). In the other cases, which make up the greater part of his work, he mentions no one, simply prefacing his remarks by the phrases וראוי שתדע, ויש לדעת, etc., corresponding to the "*intelligendum*", "*sciendum*", and "*notandum*" of Burleigh. We need not accuse him of plagiarism, as he makes no pretence to originality, telling us distinctly in his preface that he intends to reproduce the views of some of the commentators who preceded him, and add some views of his own: ואכלול בפירושי רוב מה שנמצא בדברי קצת המפרשים אשר קדמוני עם הוספות דעות מיוחדות וחדושים בהרבה מן המקובלים (202b). Still an author to whom he owed so much as he did to Burleigh ought surely to have been specially

¹ See above pp. 73 ff.

² fol. 287^b, 309, 320 and ^b, 330, 343.

named by him, particularly since he names others like Boetius, Simplicius and the rest to whom he did not owe much directly, if at all. It looks very much as if he desired to conceal from his readers the source of his information, so as to pass for an author of great erudition, if not of great originality. If we do not wish to be so severe as to brand him a plagiarist, we shall call him a compiler, and a compiler for the most part from a single source! In this latter capacity, his historical value is solely that of a medium for those who could not read Burleigh in the original — a value not to be very highly estimated. But he is not solely a compiler. As was said before (pp. 12, 22), by using the Latin ¹ text of Aristotle, he placed the study of the Logic among his coreligionists on a more exact basis than the Hebrew translations of Averroes' middle commentaries afforded before his time.

To quote here all the passages common to Burleigh and Messer Leon which the latter borrowed from the former, would mean to reproduce the greater parts of those two commentaries, both of them bulky and profuse — Burleigh even more so than Messer Leon. But this is not at all necessary. We saw in the beginning (p. 14f.) how Messer Leon follows Burleigh in determining the subject and the utility of the science of logic, and in defining and explaining the "*conceptus*" or "*intentio*" *prima* and *secunda*. We saw that the citations of authorities in Messer Leon are copies of Burleigh. When we add to this that all the "*dubia*" in the Categories, with the exception of one, are treated in Burleigh in the same way as in Messer Leon, only at greater length; that the "*conclusiones*" of Burleigh (cf. above p. 22) are reproduced as הלכות in Messer Leon; and finally quote

¹ There is little doubt that this Latin text was no other than that of Boetius, which is printed in Burleigh's "*Super Artem Veterem, etc.*".

a few parallel passages, showing how Messer Leon literally copied from Burleigh, the truth of the above characterization of Messer Leon's work will be fully established.

The account of the Platonic Idealism (cf. above p. 29 f.) is thus given by Messer Leon and Burleigh respectively.

(M. L. f. 255 f.)

(Burleigh, *op. cit.* f. 6).

והכת השלישית תחשוב שהכללים
הם חוץ לשכל במציאות נפרד מן
הפרטים ... וזאת היתה סברת אפלטון
והניעוהו אל זאת הסברה כאשר יספר
הפילוסוף בו' מס' מה שאחר שני
ענינים הענין הראשון שלא היה רואה
אפשרות הידיעה בדבר מה זולת זאת
ההנחה וזה שימנע שתהיה החכמה
מן הפרטים שהם הווים ונפסדים
ומשתנים מדבר לדבר עד אי אפשר
שתצויר בה ידיעה למה שהידיעה
היא מהדברים ההכרחיים לכן הניח
המהויות החמה הכוללות והנצחיות
אשר בהם תתכן הידיעה האמתית
והיה מניח לכל מין כולל אחד חוץ
לשכל בזה האופן כאילו תאמר מהות
הסוס מהות האדם וזולתם מן המינים
והענין השני אשר הניעוהו מה שאנו
רואים מקצת ב"ה שהם מתהווים מבלי
חבור וזכר ונקבה אבל הם מן הדברים
המעופשים כמו התולעים והזבובים
ודומיהם והמתהווה מההוה מהדומה
לו במין ולא יראה הדבר כן בערך
אלה זולת שנאמר שהם מתדמים

"Alia est adhuc opinio quae
ponit quod universalia sunt
extra animam separata secun-
dum esse a singularibus, et
haec fuit opinio Platonis ...
et huius opinionis fuit duplex
causa ut recitat Aristoteles
Septimo Metaphysicorum.
Una fuit propter scientiam
habendam de rebus sensibi-
libus et alia causa fuit propter
generationem illorum quae
fiunt per putrefactionem cuius-
modi sunt multi vermes. Et
huiusmodi prima causa fun-
datur super hoc quod de rebus
naturalibus seu sensibilibus est
scientia et de individuis habenti-
bus esse in materia sensibili
non est scientia, ergo praeter
individua sensibilia oportet
ponere universalia separata a
materia sensibili de quibus
est scientia naturalis. Causa
autem quare de sensibilibus
non est scientia est quia cum

במין לצורה ההיא המופשטת אשר
 היא סבתם ולא־אלה השתי סבות האמין
 בכללים ההם ובצורות המופשטות
 שהם ענינים נצחיים עומדים חוץ
 לשכל נפרדים מן הפרטים וכבר סתר
 ארסטו זאת הסברה בכללה בספר מה
 שאחר בראיות רבות

*sensibilia recedunt a sensu
 nescitur utrum sint aut non
 sint et ideo cum sint trans-
 mutabilia et variabilia non
 potest de eis esse scientia
 aliqua certa. Secunda causa
 fundatur super hoc quod nihil
 generatur nisi a sibi simili in
 specie. Sed generata per putrefactionem non habent sibi
 simile in specie existens in natura a quo generantur, nam
 musca non habet muscam aliam sibi similem substantialem
 a qua generatur, ergo in his quae generantur per putrefac-
 tionem oportet ponere simile in specie separatum a materia
 a quo generantur, et illud separatum a materia sensibili
 ponitur a Platone esse universale. . . . Contra istam opinionem
 arguit philosophus tertio et septimo Metaphysicorum."*

The following quotation has reference to Aristotle's motive in prefacing his *Categories* by a definition of homonyms, synonyms and denominatives (cf. above p. 38).

(f. 236)

(f. 18b)

והענין השני כי בהיות הפילוסוף
 חוקר בזה המאמר מן המאמרות
 העשרה והמאמר ילקח בהצטרף אל
 אחד משלשה ענינים אם בחיקש אל
 הגבולים העוברים אם בערך אל
 הסוגים והמינים הנמצאים תחתיו אם
 ג' שילקח מאמר אחד בהצטרף אל
 חבריו ולפי החיקש הראשון יתחייב
 הנשיאות בשיתוף או בסיפוק כי הגבול
 העובר כאילו תאמר הנמצא נשא על
 סוגי הסוגים נשיאות משותף או מסופק

"Sciendum est quod philo-
 sophus in hoc libro determinat
 de aequivocis denominativis
 et univocis quoniam res praedi-
 camentales possunt comparari
 ad tria, sc. ad ens transcen-
 dens quod est superius ad
 praedicamentum, et ad rem
 eiusdem praedicamenti, et ad
 rem alterius praedicamenti.
 Illud quod est superius ad
 praedicamenta praedicatur de

ולפי ההתייחס השני ימשך הנשיאות בהסכמה כי כן ינשא כל סוג וכולל בערך אל אשר ינשא עליהם במאמר אחד בעצמו ולפי ההצטרף השלישי יתחייב הנשיאות דרך הגזירה כי לא ינשא מאמר אל חברו נשיאות מהותיי לבלתי השתתפם במהות באר המשתתפים והמסכימים ואשר שמותם נגזרים חנה בתחלת ספרו.

illis aequivoce seu analogice, et res unius praedicamenti de re eiusdem praedicamenti praedicatur univoce, et res unius praedicamenti de re alterius praedicamenti praedicatur denominative."

The completion of the list of homonyms, etc. by the addition of other terms (cf. above p. 38) appears as follows in Messer Leon and Burleigh respectively.

(f. 236b)

והענין הששי שהגבולים כפי מה שהתבאר מדברי אבו חמד ובואיצוא מהם משותפים ומהם מסכימים ומהם מתחלפים ומהם נרדפים והגבול המשותף הוא המורה דברים רבים לפי ענינים מתחלפים והמוסכם הוא המורה דברים מתחלפים לפי ענין אחד וזה יתכן על אחד משני פנים אם שיווה אותם לפי ענין אחד מבלי חלוק בקדימה ואיחור ואז יקרא המוסכם האמתי ואם שיהיה זה בקדימה ואיחור ויקראוהו קצת המחברים מסופק ולא יקרא מוסכם באופן מיוחד ואמתי והמתחלפים הם גבולים מתחלפים לפי השם ולפי הגדר כמן שנאמר מים רוח עפר שאלה לא ינשאי על

(f. 19)

"Quinto est notandum secundum Boetium quod quaedam sunt univoca, quaedam sunt aequivoca, quaedam sunt diversivoca, et quaedam multivoca. Univoca sunt quae habent idem nomen et eandem rationem illius nominis, *et ego dico quod hoc* potest esse dupliciter vel quia ratio illius nominis convenit eis aequaliter et sic sunt proprie univoca, vel quia ratio illius nominis convenit eis secundum prius et posterius, et sic sunt analogica et non sunt univoca nec aequivoca pure, sed sunt

quaedam media inter univoca et aequivoca. Aequivoca sunt quorum nomen est idem et ratio illius nominis est diversa. Diversivoca sunt quorum nomina sunt diversa et etiam diffinitiones nominum ut ignis, lapis, color ... multivoca sunt quae habent diversa nomina et eandem diffinitionem sive rationem, ut gladius et ensis sunt multivoca.”

It will be seen that here also Messer Leon omits the phrase “et ego dico” italicized in the quotation from Burleigh, and thus gives the reader the impression that it is Boetius who subdivides univoca (מוסכם) into univoca proper, and analoga (מסופק), though he does speak of קצת המחברים in this connection, which no doubt means Burleigh.

The conditions requisite in order that a thing should come under a category (cf. above p. 40) are thus expressed by the two writers in question.

(f. 244 b)

(f. 21 b)

וראוי שתדע ... שכבר ספרו
הקדמונים שעל ידי שני דברים יאמר
שהענין במאמר מה ואם יחסר אחד
מהם לא יוגבל באחד מן המאמרות.
האחד שיהיה דבר מה והשני שיהיה
לו אופן מציאות מיוחד למה
שהמאמרות נפרדים אחד מחברו
בערך אל התחלפות אופני המציאות
כי החלוקה המהותית לבד לא יספיק
שהענינים אשר בהם ימצא החלוקה
ההוא יהיו במאמרות מתחלפים וזה
כי במאמר אחד בעצמי יהיו דברים

“Primo est sciendum secundum doctrinam antiquorum sapientium quod ad rem praedicamentalem requiruntur duo, sc. res et modus essendi superadditus illi rei, et illa duo reperiuntur in omni praedicamento. Nam praedicamenta distinguuntur ab invicem per diversos modos essendi, nam sola diversitas rerum non sufficit ad hoc quod aliqua sint in diversis praedicamentis,

רבים מתחלפי המהות כאלו תאמר
הגשם והצומח הסוס והחמור וזולתם
אמנם יהיו אלה במאמר אחד למה
שימצא להם אופן מציאות אחד כולל
ולזה הדברים שלא יוכללו באופן
מציאות אחד כולל אבל הם מתחלפים
בוה כאשר הענין כן בכל מאמר בערך
אל חברו היו במאמרים מתחלפים וא"כ
אופן המציאות הוא הדבר הצורני בענין
ההוא אשר למענו יכנס באחד מן
המאמרות והנה אופן המציאות אשר
בערו הדבר יכנס במאמר העצם הוא
מורכב משני דברים האחד שהוא דבר
עומד בעצמו והשני שהוא נושא
למקרים וא"כ הענין יכנס במאמר העצם
מצד שימצאו לו אלה הב' דברים ר"ל
שהוא עומד בעצמו ושהוא נושא
המקרים והוא אופן המציאות המיוחד
לזה המאמר ואם יחסר לו אחד מהם
לא יכנס במאמר העצם.

nam in eodem praedicamento
sunt res essentialiter diffe-
rentes, sed omnes res eiusdem
praedicamenti habent eundem
modum generalem essendi, et
si habeant modos essendi
generales primo diversos illae
res sunt in diversis praedica-
mentis. Unde modus essendi
in praedicamenti est forma-
lior quam ipsa res. Dico ergo
quod ... modus essendi per
quem aliquid rei ponitur in
praedicamento substantiae
constituitur ex duobus, sc. ex
hoc quod est per se existere
et accidentibus substat, unde
haec duo requiruntur et suf-
ficiunt ad hoc quod aliquid
sit in praedicamento sub-
stantiae."

The following passages relate to Burleigh and Messer Leon's division of relation into real and logical (cf. above p. 41).

(f. 287b)

לפי מה שספרו מזה הקדמונים
המצטרף הוא על שני פנים אם
שיצטרף הצטרפית עניני אם הצטרפות
דברי והמצטרף הצטרפית עניני הוא
אשר יוסד על ענינים חוץ לשכל
ויצטרכו לו לפי דעת קצת המפרשים
ג' תנאים הא' שקצוות הצרוף לא יתלו

(f. 35)

"Sciendum est secundum
aliquos quod relatio est duplex,
sc. relatio realis et relatio
rationis. Ad relationem realem
requiruntur tres conditiones,
prima quod extrema relationis
non dependeant ab intellectu,
sed quod sint realia. Secunda

בפעולות השכל אבל הם ענינים חוץ לשכל והתנאי השני שאלה הקצוות יתחלפו חלוף עניני והשלישי שיהיה בין אלה השתי קצוות יחס מתהפך, בעבור התנאי הראשון בין הנמצא ובלתי נמצא לא יהיה צרוף (ר"ל עניני) כי הקצוות אינם ענינים חוץ לשכל ובעבור התנאי השני צרוף האחרות שכל אחד אחד לעצמו אינו צרוף עניני למה שהקצוות לא יתחלפו חלוף עניני לכן האחד לא יצטרף לעצמו צרוף עניני, בעבור השלישי בין הודיעה לידוע לא יהיה צרוף עניני למה שאיננו יחס מתהפך כי הודיעה תאמר בחיקש אל הודיע אמנם הודיע לא ילקח בחיקש אליה אבל הנראה מדבריו אבן סינא ומדבריו קצת המפרשים בספר מה שאחר שהצרוף יקרא עניני כאשר לא יתלה בפעולת השכל ר"ל שהוא מיוסד על יסוד עניני ולפי זה צרוף אחרות הדבר אל עצמו יהיה צרוף עניני שלא יתלה בפעולת השכל ולמען לא יולד המחלוקת בהוראת התבות נוכל לחלק הצרוף העניני ולאמר שיאמר אם בכלל ואם ביחוד והצרוף העניני הנאמר בכלל הוא כאשר יוסד על יסוד עניני בלתי נתלה בפעולת השכל והנאמר ביחוד נדרוהו קצת המפרשים כשהוא הצרוף אשר בין הקצוות העניניות המתחלפות חלוף עניני אשר יצטרפו ביחס מתהפך

conditio est quod extrema relationis sint realiter diversa. Tertia quod inter extrema sit habitudo mutua. Et propter primum oppositio inter ens et non ens non est relatio realis quia extrema non sunt realia et non ferunt adinvicem nisi per intellectum. Propter secundum relatio identitatis non est realis quia extrema non sunt realiter distincta seu diversa unde idem non refertur ad se ipsum relationi reali. Propter tertiam conditionem relatio inter scientiam et scibile non est realis, quia inter illa non est mutua habitudo, nam scientia refertur ad scibile, sed scibile non refertur ad scientiam. Avicenna vero dicit quod omnis relatio quae non dependet ab intellectu realis et sic identitas est relatio realis quia non dependet ab intellectu. Ne tamen sit contentio in verbis dico de relatione reali quod relatio realis potest accipi dupliciter, sc. communiter et stricte. Communiter loquendo de relatione, sic omnis relatio est realis, sc. quae non dependet

ולפי זה גם הצרופ הדברי ילקח בכלל
וביחוד הצרופ הדברי הנלקח בכלל
הוא כל צרופ אשר אין לו קצוות עניניות
אל שהוא מיוסד על יסוד דברי כמו
הימין והשמאל בעמוד שאין לו עד
האמת לא ימין ולא שמאל כי אם
במחשבה דמיונית ויאמר גם הצרופ
הדברי הצרופ שהוא בין הדברים בלתי
מתחפכים ביחס הצרופ ואם הם ענינים
אמנם הצרופ הנאמר ביחוד הוא בלבד
הצרופ אשר ימנע היותו בלתי פעולת
השכל ולכן יגדרוהו קצת המפרשים
במה שאחר הצרופ הדברי הוא אשר
לו יסוד דברי כמו הסוג והמין וכן גם
גדרו הצרופ העניני כשהוא אשר לו
יסוד עניני כמו הדומה האב והזן.

ab intellectu, et sic identitas
est relatio realis, sed relatio
realis stricte loquendo sic po-
test describi. Relatio realis
est relatio inter extrema rea-
lia realiter distincta mutuo
abinvicem dependentia, et
sicut distinguitur de relatione
reali ita potest distingui de
relatione secundum rationem,
quia uno modo accipitur large
pro omni relatione quae non
habet extrema realia realiter
diversa vel inter quae non
est relatio mutua; alio modo
accipitur stricte sc. solum pro
relatione quae non habet esse

In one instance it is refreshing to see Messer Leon quote Burleigh (as קצת המפרשים of course), and *disagree* with him and argue against him. Burleigh maintains that the species of the category of quality mentioned by Aristotle are not species in the strict logical sense of the term, but *modes* of quality. Messer Leon insists that they are real species.

(f. 309)

(f. 38 b)

וראוי שתדע שאמרו קצת המפרשים
כי הסוגים הנאמרים בכאן שהם סוגי
האיכות או מינים אינם סוגים או
מינים מתחלפים כהתחלפות האדם
והחמור אבל הרצון בסוג או מין בזה
המקום אופן ובאמרנו ארבעה סוגי
האיכות או מיניו המכונים מיני ארבעה

"Illae quae hic ponuntur
species qualitatis, non sunt
species ex opposito distinctae
quomodo distinguitur homo et
asinus, sed species accipitur
in proposito pro modo, unde
quattuor sunt species quali-

אופני האיכות והביאו ראיה לבאר זה הדעת ממה שאנחנו נמצא שהאחד במספר יתכן היותו במינים מתחלפים כי החום לפי מה שיאמר הפילוסוף הוא במין הראשון מן האיכות מצד מה שהוא משלים הנושא בין שיהיה קשה ההסרה בין קל ההסרה והוא במין השני מצד שהוא כח טבעי והתחלה לפעולה טבעית והוא במין השלישי מצד מה שהוא התחלה לפעולה הרגשית והוא אחד במספר לכן יראה שאלה לא יהיו מינים מקבילים תחת סוג אחד כי אם אופנים לבד ונאמר אנחנו שזאת הראיה אינה ראיה למה שדבר אחד במספר יהיה במינים מתחלפים זה יקרה מצד חלוקה הבחינות כאשר יתבאר במשל הנז' שהחום מצד מה שהוא נקנה על צד ההנהגה האומניית הוא מהסוג הראשון ומצד מה שהוא טבעי לדבר רודף מזג הענין אשר ימצא לו החום הוא מהמין השני ומצד שהוא נופל תחת ההרגש הוא מהסוג הנז' וחלוקה הבחינות יספיק לשים דבר אחד במספר תחת מאמרים מתחלפים וכש שיהיה אפשר זה במינים מתחלפים שהם תחת סוג אחד והמשל שראובן שהוא אחד במספר מצד עצמו הוא במאמר העצם ומצד שהוא נשם בעל רחקים הוא במאמר הכמות ומצד שהוא במקום פלוני הוא במאמר האנה ומצד יחס חלקיו אל

tatis, i. e. quattuor sunt modi qualitatis qui modi non sunt modi ex opposito distincti, patet, nam idem numero non continetur sub speciebus ex opposito distinctis, sed idem numero est in prima specie qualitatis, in secunda et in tertia; ergo illae species non sunt oppositae. Assumptum arguitur nam calor secundum philosophum est in prima specie qualitatis et calor est in secunda specie qualitatis cum sit naturalis potentia, et calor est in tertia specie qualitatis cum sit passibilis vel sensibilis qualitas, unde idem calor numero in comparatione ad subiectum quem perficit mobiliter vel immobiliter est in prima specie qualitatis, et in comparatione ad actionem realem cuius est principium activum est in secunda specie qualitatis, quia sic est naturalis potentia, et in comparatione ad aliud quod immutat vel immutari potest est in tertia specie qualitatis, quia sic est qualitas sensibilis, unde inquantum perficit subiectum est in prima specie qualitatis

מקום מה הוא במאמר המצב ומצד שהוא בעל תכונות ומדות ואיכויות רבות הוא במאמר האיכות ומצד היותו אב או בן או תלמיד וזולתם הוא מן המצטרף ומצד היותו פועל או מתפעל הוא מאחד מאלה המאמרים, לכן הטוב שנאמר שאלה הסוגים או מינים מן האיכות הם מינים או סוגים אמתיים ואם דבר אחד במספר הוא במינים מתחלפים אחר שזה הוא בבחינות מתחלפות.

et inquantum est principium realis operationis est in secunda specie qualitatis, et inquantum est principium spiritualis vel sensibilis est in tertia specie qualitatis."

The following passages have reference to the definition of truth, and are found in the respective commentaries on the Interpretation.

(f. 343 ff.)

וראו שנתדע בזה המקום שאמרו קצת המפרשים שהאמת ילקח משני פנים אם מצד שהוא הסכמת הדבר אל השכל אם מצד שהוא הסכמת השכל אל הדבר ואם ילקח לפי האופן הראשון האמת אינו דבר אחר כי אם אחדות הנראה מן הדבר עם מציאותו האמיתי והוא הסכמת הדבר עם הכח המשכיל באשר תוכל לפרסם ענינה אל השכל באותו האופן בעצמו כמו שהוא והוא על שני פנים כמו שהדבר המשיג נכ' הוא על שני פנים ר"ל בלתי נברא ונברא, האמת שהוא הסכמת הענין עם השכל הבלתי נברא ר"ל עם שכל ה' הוא בכל נמצא בין

(f. 65 b f.)

"Est sciendum quod veritas uno modo est adaequatio rei ad virtutem cognoscentem et alio modo est adaequatio virtutis cognoscentis ut intellectus ad rem; primo modo veritas est idem quod conformitas rei ad virtutem cognoscentem per quam manifestat vel nata est manifestare se intellectui talem qualis est, et sic veritas non est aliud quam conformitas apparentiae rei ad suam existentiam, et talis veritas est duplex sicut virtus cognitiva est duplex, sc. creata

מורכב בין פשוט כי כל דבר מטבעו
 שיפרסם ענינו אל שכל הבורא באופן
 אשר ימצא למה ששכל הבורא ימנע
 שיטעה בערך אל דבר מה וזה הוא
 האמת המתהפך עם הנמצא אשר ממנו
 אמר הפילוסוף בראשון ממה שאחר
 שכל נמצא ביחסו אל המציאות כן
 יחסו אל האמת והאמת בזה האופן
 אין לו שקר מקביל אמנם האמת שהוא
 הסכמת הענין עם השכל הנברא דל
 אל שכלנו הוא הדבר אשר למענו
 יוכל הענין מצד עצמו עשות השערה
 אמתית ולפי זה הדינר אשר לו החומר
 הנאות והצורה הראויה לו הוא אמת
 אבל הדינר אשר לו הצורה הראויה
 ולא החומר הראוי שהוא מבדיל או
 מעופרת על דרך משל אינו אמת רק
 הוא דינר שקרי ומוזויף מבלתי יכולת
 לעשות מצד עצמו השערה אמתית כי
 מטבעו לעשות השערה מוזיפת וזה
 השקר הוא בלבד בדברים המורכבים
 מחומר וצורה ולכן יאמר הפילוסוף
 בשלישי מן הנפש שהשכל בערך אל
 המחות דל בערך המחות הפשוט
 מהענינים לעולם הוא אמת¹ והאמת
 הפשוט שהוא הסכמת הכח המשיג
 אל הענין המושג אפשר שיהיה לא
 בלבד בשכל אבל בחוש גל ולכן יאמר
 הפילוסוף בשני מן הנפש שהחוש

et increata. Veritas quae est
 conformitas rei ad virtutem
 cognitivam increatam, sc. ad
 intellectum divinum est in
 omni ente tam complexio (sic)
 quam incomplexio (sic), quia
 quaelibet res est nata mani-
 festare se intellectui divino
 talem qualis est cum intel-
 lectus divinus non possit circa
 aliquam rem decipi; et verum
 quod derivatur a virtute sic
 accepta convertitur cum ente
 et de ista veritate dicit phi-
 losophus secundo Metaphysi-
 corum quod unumquodque
 ens sicut se habet ad entitatem
 ita se habet ad veritatem, et
 veritas sic accepta non habet
 falsum pro suo opposito. Ve-
 ritas autem quae est adae-
 quatio rei ad virtutem cogni-
 tivam creatam, sc. ad intel-
 lectum nostrum est illud per
 quod res est nata de se facere
 veram estimationem, et isto
 modo denarius habens debitam
 formam et debitam materiam
 denarii dicitur verus denarius,
 sed denarius habens debitam
 formam et non materiam de-

¹ Something has been omitted, as can be seen from the Latin original in the parallel column.

בערך אל מושגו המיוחד לעולם הוא
 אמתי כל שעל הרוב הוא אמתי כי
 על הרוב הוא מסכים עם מושגו
 המיוחד ולא יטעה בערכו אמנם האמת
 המורכב לבד הוא בערך אל הרכבת
 וחלוק השכל ומוח האמת ידבר ארסמו'
 בזה המקום כי מפני שהשכל אומר
 על דברים מה שהם אחרים ואינם
 או שאינם אחרים והם אחרים ההקדמה
 הכוב בין שתהיה בקול בין במחשבה
 בין במכתב.

bitam dicitur falsus denarius, ut denarius cupreus et aereus vel plumbeus quia de se natus est facere falsam estimationem, nam unumquod habens formam argenti natum est facere de se veram estimationem quod est argentum et ideo denarius habens veri denarii figuram et non materiam debitam denarii ut materiam plumbeam et cupream est falsus denarius quia de se facit falsam estimationem. Haec autem falsitas est solum in compositis ex materia et forma et ideo dicit philosophus in tertio de anima quod intellectus circa quodquod est, sc. circa simplicem quiditatem rei semper est verus. Veritas autem secundo modo dicta, sc. quae est adaequatio virtutis cognoscentis ad rem cognitam est in virtute cognoscente sicut in subiecto et talis est duplex, quaedam est complexa et quaedam incomplexa; veritas incomplexa est illa quae est adaequatio virtutis cognoscentis ad rem cognitam quae potest esse non solum in intellectu sed etiam in sensu et ideo dicit philosophus in secundo de anima quod sensus respectu proprii obiecti semper est verus, hoc est in maiori parte est verus, quia in maiori parte sensus conformatur obiecto suo proprio et circa illud non decipitur. Veritas autem complexa solum est circa compositionem et divisionem intellectus, et de hac veritate loquitur philosophus cum dicit circa compositionem et divisionem, etc. Ex hoc enim quod intellectus asserit aliqua esse eadem quae non sunt eadem vel aliqua non esse eadem quae sunt eadem est propositio falsa quae hoc significat sive sit propositio in prolatione sive sit in mente."

§ 13. "THE WISE IN HIS OWN EYES".

In addition to the commentators mentioned above, Messer Leon frequently refers to an author not by name but as the "wise in his own eyes" (החכם בעיניו), and generally criticises his opinions in a tone not unmixed with personal feeling. Thus (f. 269) וגם החכם בעיניו טעה בזה המקום טעות מפורסם. (304) והנה לא צדקו דברי החכם בעיניו בזה. (351) ואמר החכם בעיניו ... ואני תמה עליו מאד איך לא התבונן בדברי המדקדקים ... (2—361) ובוה המיט נטבע החכם בעיניו עד צואר הגיע (364) הסתכל איך נשברו דברי החכם בעיניו בזה המקום כשבר נבל יוצרים ... ואולם ידעתי כי איש כמוהו יברח מהשיב אל הגזרות ההנה לבלתי יודע טבעם והוראתם האמתית, ואם יאמר ... השיבונו לו הביטה בכחוכים בספרי הקדש וראה ... ואז תדע כי הנחת לך ירחי שוא, השכח מה שאמר יעקב אבינו ... והנה הארכנו בזה לבטל דברי זה החכם על אשר העזו לדבר בגדולים ובנפלאים ממנו.

The identity of this commentator has not been known till now, (cf. Steinsch. *op. c.* p. 83, and *Ann.* 271). I shall show in the sequel that it is no other than the famous Levi ben Gerson or Gersonides, author of the religio-philosophical work 'מלחמות ה', "The Wars of the Lord", a number of commentaries on books of the Bible, and supercommentaries to the commentaries of Averroes, which enjoyed great vogue in those days.

Alike in his religio-philosophical and in his logical works is noticeable the independence and freedom which urges him to search for the truth irrespective of authority and consequences. Thus he does not scruple to set his own judgment against that of Aristotle or Averroes. In the beginning of his commentary to the Isagoge he says that his object is to indicate the passages where his opinion is different from that of Aristotle; that the logical works need no *explanatory* comment, and that therefore his primary object is not explanation (באור) but original investigation

and composition (חבור): (1 b K) "Commemorabo quoque illa loca in quibus mea sententia discrepat a sententia Aristotelis in hac arte. In quibusdam vero locis tractabo aliqua, de quibus non est locutus Aristoteles ... et hoc maxime induxit me ad huiusmodi expositionem tantum; nam quae in his traduntur libris, non indigent expositione, ut mea fert sententia", (see also Steinsch. *op. cit.* p. 67 and *Ann.* 152).

It is expressions like these and the boldness of spirit they indicate, that exposed him to the criticism of those who swore by Aristotle and his "commentator", and thus we find Moses Chabib ¹ (1486) in his commentary to the בחינת עולם of Jedaiah Ha-Penini referring to Gersonides in the following rather uncomplimentary terms: הלא תראה הרלבג כביאוריו לספרי ארסטו' אם בהגיון אם בפילוסופיא רוצה להראות כחו במה שהתחלפו דעותיו מדעת ארסטו' עד שבקצת הפישותיו היתה לו השתקקה יפה מן הדבור.

"Gersonides in his commentaries, logical and philosophical, on Aristotle, wants to show his powers in differing with Aristotle, so that in some of his views silence would have been more becoming than speech."

In view of all this, it is not strange that Messer Leon, who is writing a commentary on the same subject as his predecessor, and who is in a better position to understand Aristotle, owing to his knowledge of Latin, should apply the title החכם בעיניו to one who made such great pretensions and at the same time made such great blunders. I shall now proceed to prove the identity of החכם בעיניו.

There are in all thirteen references to החכם בעיניו, or as he calls him once (f. 224) קצת החכמים בעיניהם, in the work of Messer Leon, found fols. 224, 227, 243, 269, 304, 330 c (omitted in Mn and P), 348 b, 351 and b, 362, 364, 368—369 b, 400 b, and 406. I shall cite only those where the words or the views of החכם בעיניו are quoted.

¹ Cf. Steinsch. *op. cit.* p. 67, *Ann.* 152.

Fol. 243, Messer Leon attributes to החכם בעיניו the view that in the Categories Aristotle deals with real things *extra animam*. ומוזה יראה טעות שתי הכתות אשר אחת מהם סוברת שכוונת הפילוסוף לדבר בזה הספר מן הקולות ... ואחת מהם חושבת שאמנם היה הספור הנה מהדברים מצד מה שהם חוץ לשכל ... ומזאת הכת השנייה החכם בעיניו.

That this is the view of Gersonides we see from the following¹: (26 C) "Intelligit philosophus quod res quae sunt extra animam, ascendunt omnes ad unum decem praedicatorum generum horum... Aristoteles ostendit per haec verba quod iste vult tractare de his in hoc loco, quatenus existunt extra animam, non quatenus significant affirmationem vel negationem quae est in anima, nam de hoc tractabit et considerabit in Libro Interpretationis."

(f. 304)

(Gerson. 41 b I)

והנה לא צדקו דברי החכם בעיניו
בזה האומר שעם העלות האדם ישאר
הידוע ידוע בכח.

"Si auferatur homo, aufertur
scientia in actu et in potentia,
cum tamen possit reperiri sci-
bile in potentia scibile..."

(330 c)

(*ibid.* 57 b K)

והחכם בעיניו נתן משל לדברי בן
רשר בזה המקום ואמר שהטוב הוא
במאמר שיפעל והרע במאמר שיתפעל
כי כל התפעלות רע. ומה שאמר
במציאות והעדר ובכח ופעל אינם
מכוונים אל המאמר בבאן.

"Ratio huius est quia malum
est in praedicatione pati:
omnis nam passio est malum
quoddam. Bonum vero in prae-
dicamento agere, et denique
esse est bonum, et privatio
malum, et ideo possumus

dicere ens dividi primo in ens in potentia, et ens in actu,
et omne ens in actu est bonum, et in potentia malum."

¹ I quote from the Latin translation of Gersonides' supercommentary as it is found in the 1574 Venice Latin edition of the works of Aristotle with the commentaries of Averroes, Gersonides, and others. The original Hebrew of Gersonides is not accessible to me.

In the definition of *ῥῆμα*, Aristotle, 16*b* 6, leaves out *σημαντικὴ κατὰ συνθήκην* which he uses in the definition of the noun. Gersonides accounts for it on the supposition that the phrase *κατὰ συνθήκην* is added to *φωνή* in the definition of the *ὄνομα* to limit the latter to human speech, as *φωνή* by itself would apply equally to the sounds made by the lower animals, which are not, however, conventional but natural. In the case of the verb, no such limitation is necessary, as the rest of the definition makes it clear that the sounds of lower animals are excluded, since they do not indicate time. Messer Leon explains the omission less ingeniously but more truly, on the ground that the phrase can be supplied from the definition of *ὄνομα*, and he makes merry at the expense of Gersonides, who is so familiar with the speech of the lower animals as to be certain that it consists wholly of nouns.

(348*b*)

(ib. 71 F)

והשמיט בכאן הפילוסוף ההוראה
בהסכמה אשר זכרה בגדר השם אולי
עשה זה לחשבו שיהיה הדבר מפורסם
הנה אחר שזכרה בשם ואמר החכם
בעיניו שזה היה כי התבות אשר יורו
עליהם בעלי חיים אינם מורות על זה
הזמן ואולי הוא ידע לשונם כי התיבות
ההנה מורות על השם ולא על הפעל.

"In hac tamen definitione non dixit ad placitum significativa, quia dictiones quibus animalia irrationalia loquacitant non significant tempus illius rei."

Fol. 351, Messer Leon expresses his surprise at the statement of *החכם בעיניו* that there is no present tense in Hebrew; that the participle is sometimes used where other languages use the present tense, but that its force is not that of a present. Messer Leon is of opinion that the participial form has three uses which must be kept distinct, viz. present tense, participle, and noun.

(351)

(ib. b G)

ואמר החכם בעיניו שלא ימצא
בלשוננו גבול יורה על הזמן העומד
ואני תמה עליו מאד איך לא התבונן
בדברי המדקדקים ובמה שנמצא מזה
בכתוב כי התפרסם למי שעיון במלאכת
הדקדוק שהחלק מן הבנין אשר יקרא
הבינוני הוא מורה על ענין בזמן ההוא
כמו מדוע אתה יושב לדרך ... אלא
שכבר ימצאו תארים על משקל הבינוני
כמו אל השופט אשר יהיה וכו', אני
הרואה, אל אחרון הכתן והנוהג מנהגם
שהם על משקל הבינוני מן הקל
וההוראה על הזמן יבדיל ביניהם ר"ל
שהתאר אינו מורה על זמן ... והנה
אם נקח הולך ... מצד שיורה החליכה
בזמן העומד לא יצדק עליו היה הולך
או יהיה הולך כמו שלא יצדק ימצא
הלך אלא שיצדק זה עליו מצד מה
שהוא תאר, אמנם יתכן שקרה ללשוננו
כמו שקרה ללשון הערב שלא ימצא
לנו שמוש מיוחד להורות על זמן העומד
כי ישתתף עמו התאר שהוא על
משקלו ... ואולי זה רצה באמרו שלא
יצדק בלשוננו שהמלה תורה על זמן
העומד ... אמנם אצל הנוצרים תורה
המלה בשמוש מיוחד על הזמן העומד
אלא שלא תורה זאת התבה בטבע

"Id vero quod dicit Averroes, verbum quoque significare tempus praesens, non est verum in lingua nostra Hebraica, quum verbum ita se habens, oportet ut sit nomen denominativum seu participium: ut cum dicimus ambulans vel iacens quod Hebraice significat etiam ambulat iacet. Si hoc verbum ergo significaret naturaliter tempus praesens, tunc quemadmodum non decet dicere erit ambulabit ... vel ambulavit, per tempora diversa sc. praeteritum et futurum, ita non decet (read deceret) dicere fuit ambulans aut erit ambulans. In lingua tamen nostra, est in frequenti usu, propterea quia haec dictio ambulans est nomen, non propterea quod ambulans, quod Hebraice significat etiam ambulat, significet tempus praesens... Possumus tamen dicere quod apud Graecos datur dictio significans... tempus praesens: quum in lingua Latina ¹ reperitur dictio

¹ From this it would seem that Gersonides had some knowledge of Latin;

כאשר אמר החכם בעינו למה שהוראת
 לשונם היא בהסכמה לא בטבע. . . .
 significans naturaliter . . .
 tempus praesens, licet in aliis
 linguis nobis cognitum non
 reperiatur hoc."

In reference to the quantity of the predicate in judgments, Gersonides says, in opposition to Aristotle and Averroes, that the quantitative particle may be added to the predicate without destroying the truth of the proposition in convertible judgments, for example, all man is all rational. Messer Leon disputes this, maintaining that the proposition just stated can be true only when the quantitative particle is taken collectively, whereas the usage in logic is to take it distributively, and thus taken, the above judgment is manifestly untrue. Messer Leon waxes especially warm in expressing his righteous indignation at the unheard of presumption of Gersonides in opposing men so much greater than he.

(fol. 362)

(ib. 77 D)

יבזה הטיט נטבע החכם בעינו עד
 צואר הגיע שאמר כי ההקדמה צודקת
 בנבולים המתחפכים כמו כל אדם הוא
 כל מדבר כל אדם הוא כל שוחק
 וזולתם וזה שקר מפורסם למי שהתבונן
 במלאכת ההגיון התבוננות מהו זה כי
 התחייב מזה שכל פרטי יצדק בו שיהיה
 כל מדבר למה שזה ההתחייבות צודק
 כל אדם הוא כל מדבר ואלה כל בני
 האדם אֵלֶּה זה הוא כל מדבר וזהו כל
 מדבר וכן כלם וזה מבואר הבטול

"Licet non sit semper necessarium, ut cum nota quantitativa reperitur in praedicatione, quod sit falsum vel superfluum; quum poterit esse verum et non esse superfluum, ut cum dicitur omnis homo est omne rationale, et sic de reliquibus omnibus, quae convertuntur in praedicatione, nihilo secius propterea quod potest contingere in aliquibus materiis,

still the considerations mentioned above p. II, seem sufficient to prove that he did not have a reading knowledge of the language.

ואם היה הכוונה בזה המאמר לפי דעתו שהדבר שהוא כל אדם הוא כל מדבר כאשר יראה שתהיה כוונתו לפי מה שיאמר אֵלֶּכּי כי אם נניח שימצאו ק' אנשים לבד יצדק זה המאמר עליהם שאשר הם ק' אנשים הם כל מדבר לבלתי המצא המדבר בענין אחר וזולת האדם הנה לפי זאת ההקדמה לא היתה כוללת כי אם סתמית רַלֹּ אלה שהם כל אדם במדרגת אמרנו כל שבטי ישראל הם שנים עשר ... והנה כל חלקות מצד הנושא אינו סימן כללי מזה הצד ... והוא זולת מן הנרצה בזה המקום בתבת כל אשר הצורך אליו בעד מיני המקבילות ומוזה הצד תקרא חומה וכן גַלֹּ נצטרך לקחת תבת כל המחוברת עם הנשוא על בחינה שלא תהיה סימן שאם הוא סימן לא יצדק שאלה שהם כל אדם הם כל מדבר שיהיה הענין שב אל פרטי המדבר והיה המובן ממנו שאלה שהם כל אדם רַלֹּ אלה הק' אנשים יהיו ראובן ושיהיו שמעון וכן כלם והנה נתחייב לאמר שהמכוון בזה המאמר שהדבר שהוא כל אדם כאלו תאמר אלה הק' אנשים הם הענין שהוא כל מדבר וזה כלו הוא חוץ מכוונת הספר והוא זולת מהנרצה בחומה הנה ... (364) ואחר התישב זה הסתכל איך נשברו דברי החכם בעיניו בזה המקום כשבר נבל יוצרים

ut sit falsum vel superfluum, ideo putavit Aristoteles quod non coniungitur nota quantitativa ipsi praedicato in aliqua lingua. Sed posset quis obijcere et dicere quod si sic esset, ergo non deberet poni nota quantitativa in ipso subiecto: quia continget etiam illud esse falsum, vel superfluum. Superfluum quidem, ut cum dicitur aliquid animal est rationale; nam hoc idem sequitur si dicatur animal est rationale, et sic illud aliquod erit superfluum. Falsum vero, ut cum dicitur, omne animal est rationale. Ergo illa causa quam Averroes reddit cur non sit in usu ponere notam quantitativam in ipso praedicato, non est vera; quum ob eandemmet causam non deberet esse in usu ponere notam quantitativam in ipso subiecto. Ad hoc autem dicendum est, quod ideo non est in usu ponere notam quantitativam in praedicato, quia sunt duo quae sita simul: videlicet utrum praedicatum affirmetur de subiecto, vel an sit denegatum ab omni alia re praeterquam

וזה שהוא אומר שלא יצדק מה שאמר הפילוסוף הנה שהטעם שלא תלקח החומה מצד הנשוא הוא כי התחייב מזה שיהיה אם כזב אם מותר למה שזה יקרה לפעמים אם לקחנו אותה מצד הנשוא אם הכזב באמרנו כל חי מדבר ואם המותר באמרנו קצת החי מדבר שזה יתחייב מאמרנו החי מדבר ואם תתבונן במה שאמרנו מדברי הפילוסוף הכוונה ממנו שבוה החבור לעולם יהיה כזב כשהנשוא בעל נושאים רבים יוצע הצעה גופיית לא שיקרה לפעמים כאשר אמר הוא והתפרסם ממה שקדם שחבור קצת אל הנשוא לא יהיה מותר כאשר יהיה בחברנו אותו אל הנשוא... והסבה אשר נתנה הוא גרועה מאד אין ספק בחסרונה

ab illo. Nam cum dicimus, omnis homo est omne rationale, iudicabitur quod omnis homo est rationalis, et iudicabitur etiam quod ipsum rationale est denegatum ab omni alia re, praeterquam ab ipso homine. Haec autem sunt duo quaesita diversa, et ideo in usum venit ponere hoc in duabus propositionibus, non in una, et hoc est de se notum, quum quaesitum ipsum nihil aliud est quam utrum haec res insit huic rei, vel non insit ei; non utrum insit huic rei, et non insit alicui alteri simul."

אצל בעלי זאת המלאכה אם מצד מה שאמרנו מהבנת זה המאמר ר"ל כל אדם הוא כל מדבר שאשר יתחייב ממנו לפי הנהוג ולפי סגולת הלשון הוא זולת אשר יחשבוהו אם מצד שלא יחוש הלשון לקבץ שתי חקירות יחד ומה יאמר בהקדמות הלבדיות והזולתיות שכל אחת מהם כוללת יותר ממשפט אחד... זאת ההקדמה לבד האדם צוחק... וכן הענין בזאת ההקדמה כל חי חוץ מן האדם בלתי מדבר וזולתם מן ההקדמות כוללות משפטים יותר מאחד ואולם ידעתי כי איש כמוהו יברה מהשיב אל הגזרות ההנה בלתי יודע טבעם והוראתם האמתית ואם יאמר שאלה ההקדמות חדשות מקרוב באו חוץ מן המנהג הנאות השיבונו לו הביטת בביתובים בספרי הקדש וראה איפה הם רועים ואז תדע כי הנחלת לך ירחי שיא השבח מה שאמר יעקב אבינו אין זה כי אם בית אלהים וזה שער השמים שבה זאת ההקדמה כח שתי הקדמות ר"ל הוא בית אלהים ואינו לא בית שמויים (sic) וכן אין זה כי אם רוע לב... וכמה רבית במקומות מפורים... והנה הארכנו בזה לבטל דברי זה החכם על אשר העיו לדבר בגדולים ובנפלאים ממנו והעמדתו הספורים על תלם בין מהפלוסוף בין מאכר מבילתי שידח מהם נדח.

The following discussion concerns the interpretation of Aristotle, *Perihermenias*, ch. 7, 17^b 38—40: *Φανερόν δὲ ὅτι καὶ μὴ ἀπόφασις μὲν καὶ καταφάσεως, τὸ γὰρ αὐτὸ δεῖ ἀποφῆσαι τὴν ἀπόφασιν ὅπερ κατέφησεν ἢ κατὰφασιν, καὶ ἀπὸ τοῦ αὐτοῦ . . .*

The meaning of this is made clear by what follows in the Aristotelian text. He is evidently dealing with contradictories, and emphasizes the importance of forming them properly, so that one affirmative shall have one contradictory negative, and vice versa; although inconsistently enough, he adds an example of indeterminate propositions. Averroes' text, which follows in parallel columns in Hebrew and Latin, makes the meaning less clear than the original by the change in the order of exposition and by misleading additions.

(Lp 23 *b*)

(Lat. Aver. 76*b* I)

ואמנם אפשר שימצאו מיני אלו
המקבילות בענינים שתארונו איהם
מחלוק קצתם האמת והשקר תמיד
ושקצתם אמת יחד וקצתם
שקר יחד כשנשמר בהם שילקח
לחייב האחד מהם שוללות אחד
ולשוללות האחד חיוב אחד גב עם
שאר התנאים שנאמר לא כשנלקח
לחייב האחד יותר משוללות אחד כמו
שילקח למחייב כולל שולל כולל
ושולל חלקי כמו שנלקח המקביל
לאמרנו כל אדם לבן אין אדם אחד
לבן ואין כל אדם לבן או הפך שילקח
לשולל כולל מחייב חלקי ומחייב כולל
כמו שנקח מקביל לאמרנו אין אדם
אחד לבן אדם מה לבן כל אדם לבן
או שילקח למחייב חלקי שולל חלקי
ושולל כולל או לשולל חלקי מחייב

“At genera oppositionum
dictarum poterunt quidem ita
se habere, ut descripsimus,
scilicet, ut aliquae earum di-
vidant verum et falsum sem-
per, *aliquae vero sint simul
verae et aliquae falsae simul*;
dum capiatur pro una affir-
matione una negatio, et uni
quoque negationi respondeat
una affirmatio; servatisque
cum hoc adhuc aliis conditio-
nibus ad id requisitis, quae
adhuc dicentur, et non quod
detur uni affirmationi plus-
quam una negatio; ut quum
detur affirmationi universali
negativa universalis, et nega-
tiva particularis, ut si oppo-

חלקי ומחייב כולל ואמנם היה זה כן
 כי השוללות האחד אמנם יהיה שוללות
 לחיוב אחד וכמו כן החיוב אמנם
 הוא חיוב לשוללות אחד והראיה על זה
 כי השולל אמנם ישלול הענין הנשוא
 בעצמו אשר חייב אותו המחייב מן
 הדבר הנשוא בעצמו שחייב אותו לו
 המחייב בין שהיה זה הנשוא מן הענינים
 האישיים או מן הענינים הכוללים בין
 שחיברה בו חומה כוללת או חומה
 חלקית כי אם היה הנשוא בחיוב בלתי
 הנשוא בשוללות והנשוא בו בלתי
 הנשוא בשוללות היה לזה החיוב
 שוללות אחר ולזה השוללות חיוב
 אחר.

natur huic propositioni, scilicet
 omnis homo est albus, nullus
 homo est albus, et non omnis
 homo est albus: vel contra
 negativam universalem oppo-
 natur affirmativa particularis
 et affirmativa universalis: ut
 cum dicitur nullus homo est
 albus, opponatur aliquis homo
 est albus, omnis homo est
 albus. Et huius rei causa est,
 quia uni affirmationi una de-
 betur negatio, et ipsa quoque
 affirmatio est affirmatio unius
 negationis; et huius rei indi-
 cium est, quia negatio negat eandem rem quam affirmavit
 affirmatio de eodemmet subiecto, quod affirmavit affirmatio,
 sive illud subiectum fuerit quid singulare sive universale, in
 quo fuerit apposita nota universalis vel particularis. Nam si
 praedicatum quod affirmatur non esset praedicatum quod
 negatur, identidem et subiectum illius non fuerit subiectum
 negatum, tunc illi affirmationi dabitur alia negatio, et illi
 negationi alia affirmatio."

It will be seen that the introductory part of the above quotation, pointing out the relation of this paragraph to the preceding one, which treated of the various kinds of opposition in judgments, and particularly the phrases italicized there, lead one to think that the passage in question applies to all the classes of opposition mentioned before. Moreover, the circumstance that in Averroes the examples of the true opposites in the above quotation precede rather than follow the statement: "quia negatio negat eandem rem quam affir-

mavit affirmatio, etc.” makes the meaning of the latter more liable to misinterpretation than the similar statement in the original, which is followed by illustrative examples.

Messer Leon, who had the Latin text of Aristotle, explains the passage properly as concerned with contradictories, and the sentence “quia negatio, etc.” as guarding the reader against confusing a contrary with a contradictory opposition. In order, however, to account for the italicized phrases in the passage above quoted from Averroes, he also suggests another interpretation. Gersonides, however, who knew of no other text except that of Averroes, and was given to hypercriticism, finds a sophistical objection to the ordinary method of interpretation as set forth above, which he thinks is Averroes’ own, and suggests another interpretation of the sentence “quia negatio negat, etc.”, as expressing more correctly the thought of Aristotle. Messer Leon as in other cases quotes him at length with disapproval.

(368)

(Gers. 78 b G)

ואמר החכם בעינינו בזה המקום שזה
התנאי לפי מה שהבין ממנו אבר הוא
לבטלה שאין מדרך החולק שיחלוק
למחייב בשתי שולליות דל שאם אמר
אומר כל אדם לבן לא יחלוק עמו (b)
החולק כשיאמר יחד אין אדם אחד
לבן ואין כל אדם לבן וכו' ... ואחר
זה אמר החכם בעינינו בספרו דבר
זה ענינו ובהיות הענין כן הנה אין
ענין לזה התנאי אם היה זה המובן
ממנו ואחשוב שיהיה הרצון לזה התנאי
מה שאומר, והוא שארסמו יתנה לפי
מה שאחשוב שלא ילקח בגורו אחת
חלק מה מוגבל מהנשוא או הנשוא

“Verumtamen contra hanc
conditionem ab Aristotele po-
sitam, insurgit dubium non
mediocre: nempe quod si
Aristoteles intellexeret per
hanc conditionem id, quod in-
telligit Averroes, tunc huius-
modi conditio esset posita
temere. Nam si adesset aequi-
vocatio in nota quantitativa,
ut diximus nos, tunc obiiiciens
intelligeret eam veluti parti-
cularem, vel tanquam univer-
salem; sed non intelliget ullo
pacto quod sit simul partialis

בגורא אחרת כי כשיהיה הענין על זה התאר לא יהיה לחיוב האחד כח שוללות אחד ואז גַּם לא תצדקנה הסגולות שנאמרו במקבילות והמשל שיאמר אומר כל חי מדבר ויחלוק עמו החולק כשיאמר אין אדם אחד מדבר והוא מבואר שאין זה השוללות אחד לחיוב ההוא (369) כי כבר ימצאו לחיוב ההוא שוללות רבות על זה האופן כמו שנאמר אין סיס אחד מדבר אין חמור אחד מדבר ולזה לא לוקח לחיוב ההוא כח שוללות אחד אבל כח שולליות רבות ואולם השוללות האחד לזה החיוב הוא אמרנו אין חי אחד מדבר או אמרנו אין כל חי מדבר והוא מבואר גַּם כי כשיהיה הענין על זה התאר לא תצדקנה בהם בהכרח הסגולות שנאמרו במקבילות וזה שלא ימנע אם שיחשב בשתי אלה הגזרות שהם הפכיות מפני שבכל אחד מהם חומה כוללית והוא מבואר שלא תצדקנה בהם סגולות ההפכיות או שיחשב בהם שהם סותרות מפני שהאדם הוא קצת החי ויחשב מפני זה שהיה אמרנו אין אדם אחד מדבר כחו כח אמרנו קצת החי אינו מדבר והוא מבואר שלא תצדקנה בהם סגולות הסותרות כי שתיהן כוזבות ואם אמרנו גַּם תמורת אמרנו אין אדם אחד מדבר אין כל אדם מדבר הנה יחשב או יותר שהם סותרות לפי שהיא חלקית

et universalis. Sed nemo dubitat quod non est obiicientis consuetudo, ut obiiciat ipsi affirmanti per duas negationes, videlicet quod si dixerit quispian, omnis homo est albus, non obiiciet ei obiiciens ut dicat simul nullus homo est albus, non omnis homo est albus, nisi forte retrahat se a prima negatione et dicat secundam negationem et ipsum oppositum erit secunda negatio, non prima; sed utcunque sit tandem manifestum est quod hae duae negationes simul non sunt oppositae propositioni ipsius affirmantis, quia non sunt una propositio sed quaelibet earum opponitur proprie ei, et in qualibet earum reperiuntur illae proprietates quae enumeratae sunt in illa oppositione. Si ergo haec esset sententia huius conditionis, tunc nihil faceret haec conditio in hoc negotio; sed ut mea fert sententia, Aristoteles voluit per hanc conditionem ut non sumatur in una enunciatione aliqua pars terminata ipsius subiecti, vel ipsius praedicati in altera enun-

והנה לא תצדקנה בהם סגולות הסותרות
 וכוה יהיה הענין בחיוב דל כשלוקח
 לשוללות אחד כח חיוב יותר מאחד
 כמו שילקח המקביל לאמרנו אין חי
 אחד מדבר כל סוס מדבר או קצת
 הסוס מדבר כי כשהיה הענין על זה
 התואר לא תצדקנה בהם הסגולות
 שנאמרו במקבילות וזה מביאר וכמו זה
 הענין יקרה בנשוא. והמשל שיאמר
 אומר ויד בלתי מרגיש ויחלוק עמו
 החולק ויאמר שהוא מרגיש בעינו הנה
 אין זה החיוב אחד לשוללות החוא
 אבל הוא כח חיובים רבים כי כבר
 ימצאו לשוללות כח חיובים רבים על
 זה הצד כמו שנאמר שהוא מרגיש
 בלשינו או באזנו או באפו ולזה אפשר
 שיושם מקביל לאמרנו אין איספוג ימיו
 אחד מרגיש אמרנו קצת האספוג ימיו
 מרגיש בחיש הראית הנה אלה שתי
 הנזרות יחשב בהם שהם סותרות והם
 כוזבות יחד והוצרך ארסטו לזה התנאי
 כי כבר יהיה המחלוקת על זה האופן
 (b) ויאמר ארסטו שהראיה על זה דל
 כמה שאמר שיחויב במקבילות שיהיה
 לשוללות האחד כח חיוב אחד ולחיוב
 האחד כח שוללות אחד כי השולל
 אמנם ישלול הענין הנשוא בעצמו
 שחייב אותו לו המחייב מהדבר הנשוא
 בעצמו שחייב אותו לו המחייב וכוה
 הענין היה המחלוקת ביניהם וזה שאם
 היה הנשוא בחיוב בלתי הנשוא

ciatione; quum si ita fieret
 tunc uni affirmationi non da-
 retur vis unius negationis,
 neque tunc etiam verae essent
 illae proprietates dictae in ip-
 sis oppositis, ut gratia exempli,
 si dixerit quispiam omne ani-
 mal est rationale, et obiiciat
 ei obiiciens dicens nullus homo
 est rationalis, quod autem
 haec negatio non sit una illi
 affirmationi, nemo ambiget
 quia illi affirmationi dabuntur
 plures negationes, ut si dica-
 tur nullus equus est rationalis,
 nullus asinus est rationalis, et
 ideo non respondet illi affir-
 mationi vis unius negationis,
 sed vis plurium negationum,
 sed una negatio respondens
 illi affirmationi erit haec, nul-
 lum animal est rationale vel
 haec, non omne animal est
 rationale. Constat autem quo-
 que quod si ita res se habe-
 ret, tunc non verificarentur de
 eis illae proprietates datae in
 ipsis oppositis de necessitate;
 quum necesse est ut existi-
 mentur hae duae enunciatio-
 nes esse contrariae quia in
 qualibet earum extat nota
 quantitativa universalis et de

בשוללות והנושא בחיוב בלתי הנושא
בשוללות היה לזה החיוב שוללות אחר
וזלת זה השוללות ולזה השוללות חיוב
אחר וזלת זה החיוב וכאשר התישב
זה אל שהמחלוקת כבר תהיה בנושא
האחד ובנושא האחד הנה כשלוקח
בגורה האחת חלק מה מהנושא השני
או חלק מה מהנושא הנה אינה מקבלת
לגורה שילקח בה זה החלק לבד ואמנם
יחשב שתהיה היא המקבלת מצד מה
שקרה שנכללה בה המקבלת לה והמשל
שכבר יחשב שיהיה אמרנו כל חי
מדבר מקביל לאמרנו אין אדם אחד
מדבר מצד מה שקרה שנכללה בה
הגורה המקבלת לה והוא אמרנו כל
אדם מדבר ולזה תהיה המקבלת לה
כל אדם מדבר לא כל חי מדבר כי
אינה מקבלת מצד שאר מיני בעלי
חיים הנכללים בה וזלת האדם כי לא
חלק החולק בהם כלל בזה המאמר
והנה להם בהכרח שוללות אחר לא
זה השוללות והנה זאת הראיה התאמת
בה שאם לא היה הענין כן בזה התיאור
לא תהיינה מקבילות באמת ע"כ דברי
זה המחבר.

omnis equus est rationalis vel aliquis equus est rationalis,
sic enim non verificabuntur de eis illae proprietates datae
ipsis oppositis, ut perspicuum est. Identidemque continget in
ipso praedicato ut gratia exempli, si quispiam dixerit Socra-
tes non sentit et obiiciens obiiciat ei et dicat quod sentit
oculo, tunc haec affirmatio non erit una illi negationi, sed
habet vim plurium affirmationum sic, videlicet dicendo quod

istis profecto non verificantur
proprietates contrariarum, nec
existimantur esse contradicto-
riae, quia homo est aliquod
animal, et ideo existimabitur
quod cum dicimus nullus homo
est rationalis habeat vim istius,
scilicet aliquod animal non est
rationale, et de his quoque
non verificabuntur omnino pro-
prietates contradictoriarum
quia utraeque sunt falsae. Et
si diceremus etiam vice huius,
sc. nullus homo est rationalis,
hanc, non omnis homo est
rationalis, tunc posset potius
existimari quod sint contra-
dictoriae, quia est particularis;
tamen non verificabuntur de
eis proprietates contradicto-
riarum et parutique erit ratio
de affirmatione, videlicet, si
uni negationi detur vis plurium
affirmationum ut si capiatur
pro opposita huius, nullum
animal est rationale, haec,

sentit lingua vel aure vel naribus eius, et sic poterunt esse hae ambae falsae, cum Socrates fuerit caecus. Idemque continget in enunciationibus universalibus, ut exempli causa si detur pro opposita huius, nulla spongia marina sentit, haec, aliqua spongia marina sentit sensu visus, hae autem duae enunciationes reputabuntur esse contradictoriae cum tamen sint simul falsae et ideo fuit coactus Aristoteles ponere hanc conditionem quia potest fieri obiectio hoc modo dicto. Dicit igitur Aristoteles quod huius rei indicium, sc. quod oporteat uni negationi dari, ac respondere id quod habeat vim unius affirmationis et uni affirmationi respondere una negatio, indicium est, quia negans negat quidem eandemmet rem praedicatam, quam affirmavit ipse affirmans, ab ipsamet re subiecta, et hac ratione extat inter eos disceptatio, nam si praedicatum affirmatum non esset praedicatum negatum vel subiectum non esset subiectum, tunc illi affirmationi responderet alia negatio praeter hanc negationem, et huic negationi alia affirmatio, praeter hanc affirmationem. Si igitur controversia et disceptatio fiet in uno subiecto et in uno praedicato, ergo si capiatur in una enunciatione aliqua pars ipsius subiecti quod est in altera, vel aliqua pars praedicati, tunc non erit illi opposita, sed erit opposita illi enunciationi in qua capitur illa pars tantum. At existimatur quod illa sit sua opposita, quia contigit ut contineatur in ea illa enunciatio quae est opposita ei, ut gratia exempli, haec, omne animal est rationale, existimabitur quod sit opposita huic, nullus homo est rationalis; quia contingit quod contineatur in ea enunciatio quae est ei opposita, quae quidem est haec, omnis homo est rationalis, et ideo sua opposita erit haec, omnis homo est rationalis, non haec, omne animal est rationale; quia non est sua opposita ratione reliquarum specierum animalium, quae in ea continentur praeter hominem; nam obiciens non obicit de illis ullo pacto in hac propositione, necessario enim habent aliam negationem

non hanc. Hac ergo ratione fuit verificatum, quia si res non ita se haberet, tunc non essent vere oppositae.”

Averroes in his paraphrase of Aristotle's *Perihermenias*, divides opposition in judgments into six classes, viz. contraries, contradictories (two classes), sub-contraries, singulars, and indeterminates. Towards the end of the book, where Aristotle discusses whether opposition by affirmation and negation or by opposition of predicates is the stronger. Averroes speaks only of five classes. Gersonides accounts for the number five by saying that Averroes took the contradictories as one class, because where the opposition lies in the predicate and not in affirmation and negation no division can be made into those where the universal is affirmative and those where it is negative, since they are both either affirmative or negative. Messer Leon here also disagrees with החכם בעיניו on the ground that here too one of the predicates corresponds to the affirmative and the other to the negative. He, therefore, thinks that Averroes omitted the indeterminates because they are either sub-contraries or contraries according to the way we take them.

(406)

(*ib.* 104 b K)

ואמר החכם בעיניו ואמנם אמר
המינים החמשה לפי שהסותרות לא
יהיו הנגה כי אם מן אחד דל כאשר
נשואיהם הפכיים וזה כי שתי הנגרות
הם מחייבות אי שוללות ולזה לא
תהיה בהם חלוקה מצד היות הכוללת
היא המחייבת והחלקיית שוללת או
הפך כאשר היה הענין במקבילות ע"ז
החייב והשוללות ע"ז דבריו.
affirmativa, et particularis negativa, vel e contra, ut res se habebat in oppositis secundum affirmationem et negationem.”

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GLOSSARY.

- אבן סִינָא Avicenna.
 אִימְנִי (טבעי) artificial.
 אִפֵּן *modus*, mode, manner.
 אֶחָדוּת identity.
 אִיד or אִיכוּת *ποιόν*, *qualitas*, category of quality.
 אִיד = אִיכוּת.
 אִיסְפֹּנְג sponge.
 אִישׁ *individuum*.
 אִמַּר say; מִאֲמָר *κατηγορία*, *categoria*, category.
 אִנְיָ *πῶς* (name of one of the categories).
 אִנְיוּת *humanitas*.
 אִפִּיקוֹרוֹס Epicurus; אִפִּיקוֹרִיסִים Epicureans.
 אִרִּסטוֹ Aristotle.
 בָּדַל to divide, separate; מִבְּדִיל or הִבְדִּיל *διαφορά*, *differentia*.
 בּוֹא to enter; מְבּוֹא *εἰσαγωγή*, *introductio*; סֵפֶר הַמְּבּוֹא the Isagoge of Porphyry.
 בּוֹרְלֵיאוֹ Burleigh, (Walter).
 בְּחִינָה aspect, point of view.
 בִּטּוּל nullification, invalidation; הַבְּטוּל אֶל הַבְּטוּל *reductio ad absurdum*.
 בִּטּוּל *absurdum*.
 בִּינּוּנִי participle.
 בִּקֵּשׁ to seek; מְבּוֹקֵשׁ the thing sought, desired to prove, *propositum*.
 גָּבַל see גְּבול.
 גָּבַל to bound, limit; גְּבול *terminus*, (in logic), term; הַגְּבָלָה limitation.

גבורה (*ἀνδρεία*); רכות הלבב.

קטנה (*major* (premiss in a syllogism)) גדולה.

גדר = הגדרה (*ὄρος. ὁρισμός, definitio*); גדר to fence, hedge;

גזר to cut, decree; גזרה (*ἀπόφασις, παρωνυμία*); גזור *παρώνυμον*.

גזרה see גור.

גשמי (*רוחני*) (*corporeum*); רוח (*σῶμα, corpus*); גשמי.

גשמי see גשמי.

דבר (*logικός, rationalis*) מדבר (*realis*) ענייני (*a. rationis*); דברי (*piel*) to speak;

דבר see דברי.

דכל see בדל.

דכלה see גבל.

הגדרה see גדר.

הגיון *logica, logic*.

הדרגה graduation; בהדרגה gradually, by degrees.

החלט absoluteness; בהחלט *absolute, absolutely*.

המעאה (*refutatio, ἐλέγχω*); ספר ההמעאה, the *Περὶ Σοφιστικῶν Ἑλέγχων* of Aristotle; הויקש המעאוי, *συλλογισμὸς ἐλεγκτικός*.

המעאוי see המעאה.

הויקש *συλλογισμὸς*; ספר ההויקש the Prior Analytics of Aristotle.

הלצה (*ῥητορική, rhetorica*); הויקש הלצוי *συλλογισμὸς ῥητορικός*.

הנהגה conduct, behavior, practice.

הנחה assumption, hypothesis.

הסכמה ראשונה, שניה, agreement, convention; *impositio, positio*; *impositio prima, secunda* (cf. Boet. In Categ. ed. Migne, 159 C.; Burleigh, Sup. Art. Vct. Exp. f. 64 b); בהסכמה *κατὰ συνθήκην, secundum placitum*; *συνανύμω, univoce*.

הספקה sufficiency, satisfactoriness, conclusiveness.

העדר *στέρησις, privatio*; absence.

הפך to turn; הפכי *ἐναντίον, contrarium*; הפכיות *contrariae* (of judgments) *sub-contrariae*; תחת תחת הפכיות *convertible, reciprocal*.

הפכי see הפך.

הַפְּכוּיּוֹת see הפך.

הַפְּשָׁטָה see פשט.

הַפְּשָׁטוֹת = הַפְּשָׁטָה.

הַצָּמָרָה see צרף.

הַקְּבָלָה *oppositio*.

הַקְּדָמָה *πρότασις, propositio*.

הַרְגֵּשׁ = חוֹשׁ (see מוֹרָגֵשׁ) רגש.

הַרְבָּכָה *σύνθεσις, composition* (חלוק).

הַשְׁגָּה see נשג.

הַתְּחִיבוֹת see חייב.

הַתְּחִלָּה *ἀρχή, principium*.

הוֹמָה *nota quantitativa* (placed before the subject in a judgment to indicate its quantity).

חֲמוּרִי (חֲמוּרִי *ὕλικός, materialis*; חֲמוּרִי *ὕλη, materia*) חומר.

חֲמוּרִי see חומר (צוריי).

חֲמוּשׁ *ἀίσθησις = הֶרְגֵּשׁ* (מוֹחֵשׁ) חוש.

חֵיב to be obliged, necessary; hithp., to follow as a necessary inference or conclusion; הַתְּחִיבוֹת inference, conclusion; חֵיב *affirmatio* (שְׁלֵלוֹת).

חֵיב see חייב.

חֲמָאכָה *scientia* (מְלָאכָה).

חֲלֹק see חלק.

חֲלֹק to divide; חֲלֹק division, separation, analysis; חֲלֹק *διωρισμένος* (חֲלֹק *partialis, particularis, particular*; חֲלֹק *discretus, discrete*) (מְחַלֵּק).

חֲלֹק see חלק.

חֲפִישׁ *ἐπαγωγή, inductio, induction* (חפש) חפיש.

חֲקוּי *λόγος μιμητικός* ספור חקווי; חֲקוּי *μίμησης* חקוי.

חֲשִׁיבוֹת *ἀρετή, virtus* (פְּחִיתוֹת).

חֲבָעִי natural (אומני) *the Περὶ τῆς Φυσικῆς Ἀκροάσεως* of Arist.

חֲלִיאָה *Tullius (Cicero)*.

חֲוִיָּצִי *Stoics*.

חֲדָע see ידע.

יִדְעָה see יָדַע.

יָדַע to know; יָדוּעַ ἐπιστητόν; יִדְעָה ἐπιστήμη.

בְּיָחוּד (strict) בְּיָחוּד, יָחוּד.

יָחוּד γένος, rarely used in place of סוּג. Anatoli uses it in the Isagoge; relation.

יָלַד to be born, arise; הוֹלִדָּה conclusio.

יָסוּד (יסוד) στοιχείον, elementum, element.

יָפְעַל (category) ποιεῖν.

יָתְפְעַל (category) πάσχειν.

יָוִוָה intentio; יָשׁוּנָה ראשונה, intentio prima, secunda; cf. צוּר.

כַּח power; כִּבְחָם δύναμις, in potentia.

כִּלּוּת ἀνελευθερία, illiberality (נְדִיבוּת).

כִּיּוּי προσήγορία, appellatio.

כֹּלֵל see כָּלֵל.

כֹּלֵל to include, contain; כֹּלֵל universalis; כִּלְיָי = כֹּלֵל = כִּבְלָי commu-
niter) בְּיָחוּד.

כִּמְהָ ποσόν, quantitas, category of quantity.

כִּמְהָ = כִּמְהוּת.

כִּתָּה sect, school, αίρεσις.

כִּמְאָמַר see אָמַר.

כִּהְבִּדָּל = מְבַדִּיל.

כִּבּוּא see בּוּא.

כִּבּוּקָשׁ see בִּקֵּשׁ.

כִּדְבָר see דְּבַר.

כִּדּוּתִי ethical.

כִּהּוּת essentialis; כִּהּוּתִי essentialis.

כִּהּוּתִי see כִּהּוּת.

כִּהְחֵלֵם = כִּמְחֵלֵם absolute; מוֹחֵלֵם.

כִּחֹשׁ (חֹשׁ) מוֹחֵגֵשׁ = αἰσθητόν.

כִּפְשָׁט see פֶּשֶׁט.

כִּפְתָּה ἀποδείξεις, demonstratio; סִפְרֵי הַמּוֹפֵת the Posterior Analytics of
Aristotle; הִקְשׁ מוֹפְתִי συλλογισμὸς ἀποδεικτικός.

מוקף (נקף) the body or surface surrounded or limited, מוקף).

רגש; רגש (מוחש) = רגש) מורגש.

מורכב (רכב) *compositus, complexus, κατὰ συμπλοκήν*.

מושאל *κατὰ μεταφωράν, secundum translationem*.

נשיג; משיג) מושג.

מוג temperament, disposition, character.

מילה *particula; ῥῆμα, verbum*.

מין *εἶδος, species; מין המינים species specialissima, lowest species*.

מלאכה) *ars, art* מלאכה.

מנגד opponent.

מוסמן *γνώμων*.

מסופק *ἀνάλογον, analogum*.

מסכים *συνώνυμον, univocum*.

מעלה) חשיבות = מעלה.

מצא to find; מצאות *existentia*; נמצא, *ὄν, τὸ ὄν, ens*; נמצא *ens rationis*, p. 15 ff.

מצב *θέσις, κείσθαι; positio, situs*.

מצטרף see צרף.

מצאות see מצא.

מקביל opposite.

מקבילות opposites (of judgments).

מקום) *τὸ τόπον κατέχον, corpus locatum* that which occupies place, מקום place.

מוקף) the surrounding body or limit (נקף) מוקף.

מקרה) *συμβεβηκός, accidens* (קרה) מקרה.

מרגיש see רגש.

מרוכע *quadratus, square*.

משאי (cf. Ar. *مشى* fr. *مشى* to go on foot) Peripatetic, cf. p. 28.

משתף see שתף.

מושיג) נשיג see משיג.

משתף = שתף see שתף.

מִתְחַלֵּק (συνεχής, *continuus*), מִתְחַבֵּק.

חֶפֶךְ convertible, reciprocal; see מִתְחַבֵּק.

מִתְחַלֵּף ἐτερώνυμον, *diversivocum*.

חֶלֶק δῖωρισμένος, *discretus*; see מִתְחַלֵּק.

נִגְזֵר see גִּזְרֵה.

כִּילוֹת (ἐλευθεριότης, *liberality*), נְדִיבוּת.

נִשְׂא see נִשְׂא.

נִמְצָא see מִצָּא.

נִמְשָׁךְ consequens (קוֹדֵם), מִקְבִּיל הַנִּמְשָׁךְ, oppositum consequentis.

נִפְרָד ζῆνυ συμπλοκῆς, χωριστός.

נִפְשׁ anima; בֶּעַל נִפְשׁ animatus.

נִצּוּחַ the Topics of Aristotle; סֵפֶר הַנִּצּוּחַ διαλεκτική; (נצח, to conquer, excel) הַקִּיּוֹשׁ הַנִּצּוּחַ συλλογισμὸς διαλεκτικός.

נִצּוּחִי see נִצּוּחַ.

נִרְבֵּךְ πολώνυμον, *multivocum*.

נִשְׂא (cf. Ar. حمل) κατηγορεῖν, *praedicare*; נִשְׂא ὑποκείμενον, *subiectum*;

נִשְׂא κατηγορούμενον, *praedicatum*; *praedicabile*; נִשְׂאיות κατηγορία, *praedicatio*.

נִשָּׂא hiph. to comprehend; הַנִּשָּׂא comprehension; מִשְׁיֵג consequens, quod ad aliquid consequitur; כַּח הַמִּשְׁיֵג the faculty of comprehension, the intellect; מִשְׁשָׁג the thing comprehended, the concept.

נִשְׂא see נִשְׂא.

נִשְׂאיות see נִשְׂא.

סֶבֶה causa; סֶבֶה פּוֹעֵלִית causa efficiens; סֶבֶה חוֹמָרִית causa materialis;

סֶבֶה צוּרִית causa formalis; סֶבֶה תְּכֵלִיתִית causa finalis.

סְגוּלָּה ἴδιον, *proprium*.

סֶדֶר order, arrangement; בְּסֶדֶר לְ in ordine ad, in relation to, as compared with.

סוּג גֵּנּוֹס, genus; סוּג הַסּוּגִים = סוּג עֲלִיוֹן genus generalissimum, highest genus; סוּג מְמוּצָע genus subalternum, intermediate genus.

סוֹתֵרוֹת contradictoriae (of judgments), contradictories.

סִנִּיקָא Seneca.

סְפּוּק ἀναλογία, *analogia*, analogy.

ספק ἀπορία, *dubium, dubitatio, quaestio.*

סוקרטס Socrates.

סתמיות indefinitae (of judgments), indefinites.

עובר transcendens.

זמן עומד — עומד present time.

רבר see דברי) ענייני) קניין) *res; διαθεσις, dispositio*

ענין see ענייני.

עצמים, שניים *essentia*; עצמות *per se*; מצד עצמו *οὐσία, substantia*; עצם *εἶδος, πρωτοι, δεύτεραι οὐσίαι* — ראשונים

עצם see עצמות.

בְּעֵרֶךְ אֶל — עֵרֶךְ in relation to, in comparison with.

בְּכַחַת) פועל) *ἐνέργεια, in actu* — פועל.

פורפיריאוס Porphyry.

חַשִּׁיבוֹת) *κακία, vitium, vice* פחיתות.

פֶּעַל *ῥῆμα, verbum*.

פְּרָטִי *ἄτομον, individuum*.

פֶּשֶׁט see מורכב) פשוט.

מופשט; מורכב) *χωρίζειν, abstrahere*; פשוט *incomplexum, simple* פשט *χωριστόν, abstractum*; הפשטה = הפשטות *abstractio, abstraction*.

חמרי) *εἶδος, forma* צורה) *εἰδικος, formalis* צורני; חומר) צורה.

בוונה 8 f. 15 f., see *conceptus primus, secundus* ציור ראשון, שני *conceptus* ציור.

צרה see צרוף.

צרה to join; צרוף *relatio*; אל בהצטרף *in relation to, in reference to*; מִאֲמָר הַמְצִטְרָף category of relation.

קו *γραμμή, linea, line*.

קודם *antecedens*) נמשך) *oppositum antecedentis* מקביל הקודם.

קטנה *minor* (premiss in a syllogism) גְּדוֹלָה).

קניין) *ἕξις, habitus* ענין).

קצוות *extrema, extremes*.

רביע העגול — רביע *κύκλου τετραγωνισμός, quadratura circuli*.

רגש to feel; רגיש = חוש; מורגש = מוחש; מרגיש *sensibilis*.

גדר) *descriptio* רושם.

בחן *dimension*.

ריקות *κενόν, vacuum, vacuum*.

פישוט) *compositus, complexus, κατὰ συμπλοκήν* מורכב; *hiph. componere* רכב.

גבורה) *δειλία* כפות הלךב.

חיוב) *negatio* שוללות.

שטח *ἐπιφάνεια, superficies, surface*.

היקוש שריו *συλλογισμὸς* the Poetics of Aristotle; ספר השיר *ποιητική*; שיר *ποιητικός*.

שם *ὄνομα, nomen, noun*.

שמע טבעי the *Περὶ τῆς Φυσικῆς Ἀκροάσεως* of Aristotle.

שתף see שתף.

שתף *δμώνυμα* or משותפים; משותפים *δμώνυμα*, *aequivoca*; שתוף *δμωνυμία*.

תמונה) *μορφή, forma* תאר.

תולדה *conclusio*.

תאר) *σχῆμα, figura* תמונה.



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